

## **MIB REFERENCE**

# **RADWIN BROADBAND WIRELESS PRODUCTS**

MIB Release 10.2.40.02

**RADWIN**

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# Chapter 1: Introduction

## 1.1 About the MIB

The RADWIN MIB is a set of APIs that enables external applications to control RADWIN equipment.

The MIB is divided into public and a private API groups:

- **Public:** RFC-1213 (MIB II) variables, RFC-1214 (MIB II) System and interfaces sections
- **Private:** Controlled by RADWIN and supplements the public group.

This appendix describes the public and private MIB used by RADWIN.

## 1.2 Terminology

The following terms are used in this document.

Term	Meaning
CPE	Customer Premises Equipment. Used in the same manner as HSU.
MIB	Management Information Base
API	Application Programming Interface
SNMP	Simple Network Management Protocol

In addition, the MIB uses internally, the older notions of **Local site** and **Remote site** where this manual would use site A and site B.

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# Chapter 2: Interface API

## 2.1 Control Method

The RADWIN Manager application provides all the means to configure and monitor a RADWIN Broadband Wireless Products link, communicating with the SNMP agent in each ODU. Each SNMP agent contains data on each of the PoEs and ODUs in the link. Both agents communicate with each other over the air using a proprietary protocol.



Each ODU has a single MAC address and a single IP address.

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To control and configure the device using the MIB, adhere to the following rules:

- The connection for control and configuration is to the local site, over any SNMP/UDP/IP network.
- All Parameters should be consistent between both of the ODUs. Note that inconsistency of air parameters can break the air connection. To correct air parameters inconsistency you must reconfigure each of the ODUs.
- Common practice is to configure the remote site first and then to configure the local site.
- For some of the configuration parameters additional action must be taken before the new value is loaded. Please refer to the operation in the parameters description.
- Some of the MIB parameters values are product dependent. It is strongly recommend using the RADWIN Manager Application for changing these values. Setting wrong values may cause indeterminate results.

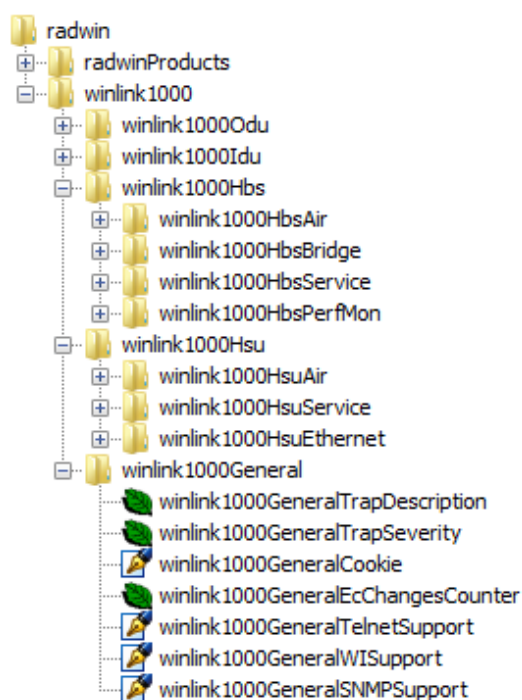
## 2.2 Community String

To control a link, all SNMP requests should go to the local site IP address.

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# Chapter 3: Private MIB Structure

The sections in the private RADWIN MIB and its location in the MIB tree are shown in [Figure 3-1](#) below:



*Figure 3-1: Top Level Sections of the private MIB*

The products MIB section contains the definition of the Object IDs for the two types of radio units, Integrated Antenna (where applicable) and Connectorized (referred in the MIB as **external antenna**) and GSU (where applicable):

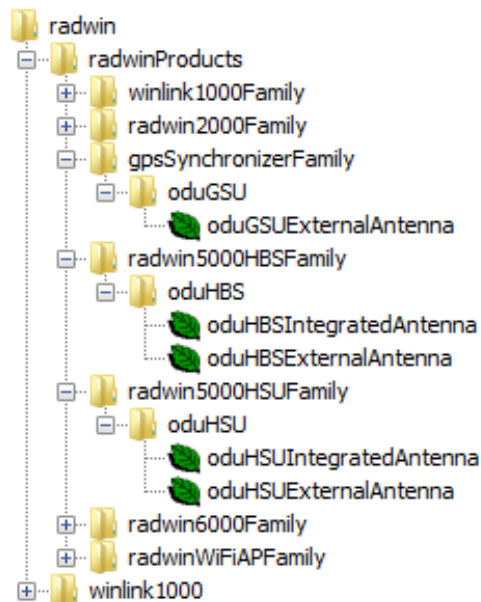


Figure 3-2: Product MIB

The GpsSynchronizerFamily MIB defines the GSU.

The general MIB include a single generic parameter that is used by all traps as a trap description parameter.

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# Chapter 4: MIB Parameters

This section describes the MIB parameters. The MIB parameters use the following naming convention:

<winlink1000><Section 1>...<Section n><Parameter Name>

For each of the configuration and control parameters (parameters with read-write access), the “Description” column describes when the new value is effective. It is recommended that you perform the appropriate action to make the values affective immediately after any change. Where a change is required on both sides of the link, it is recommended that you change both sides of the link first and then perform the action.



## 4.1 Supported Variables from the RFC 1213 MIB

Table 4-1: Supported Variables

Name	OID	Type	Access	Description
ifIndex	.1.3.6.1.2.1.2.2.1.1.x <sup>a</sup>	Integer	RO	A unique value for each interface. Its value ranges between 1 and the value of ifNumber. The value for each interface must remain constant at least from one re-initialization of the entity's network management system to the next re-initialization.
ifDescr	.1.3.6.1.2.1.2.2.1.2	DisplayString	RO	A textual string containing information about the interface. This string should include the name of the manufacturer, the product name and the version of the hardware interface.
ifType	.1.3.6.1.2.1.2.2.1.3	Integer	RO	The type of interface, distinguished according to the physical/link protocol(s) immediately 'below' the network layer in the protocol stack.
ifSpeed	.1.3.6.1.2.1.2.2.1.5	Gauge	RO	An estimate of the interface's current bandwidth in bits per second. For interfaces which do not vary in bandwidth or for those where no accurate estimation can be made, this object should contain the nominal bandwidth.
ifPhysAddress	.1.3.6.1.2.1.2.2.1.6	Phys-Address	RO	The interface's address at the protocol layer immediately 'below' the network layer in the protocol stack. For interfaces which do not have such an address (e.g., a serial line), this object should contain an octet string of zero length.
ifAdminStatus	.1.3.6.1.2.1.2.2.1.7	Integer	RW	The desired state of the interface. The testing(3) state indicates that no operational packets can be passed.
ifOperStatus	.1.3.6.1.2.1.2.2.1.8	Integer	RO	The current operational state of the interface. The testing(3) state indicates that no operational packets can be passed.
ifInOctets	.1.3.6.1.2.1.2.2.1.10.x	Counter	RO	The total number of octets received on the interface, including framing characters.
ifInUcastPkts	.1.3.6.1.2.1.2.2.1.11.x	Counter	RO	The number of subnetwork-unicast packets delivered to a higher-layer protocol.
ifInNUcastPkts	.1.3.6.1.2.1.2.2.1.12.x	Counter	RO	The number of non-unicast (i.e., subnetwork-broadcast or subnetwork-multicast) packets delivered to a higher-layer protocol.
ifInErrors	.1.3.6.1.2.1.2.2.1.14.x	Counter	RO	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
ifOutOctets	.1.3.6.1.2.1.2.2.1.16.x	Counter	RO	The total number of octets transmitted out of the interface, including framing characters.
ifOutUcastPkts	.1.3.6.1.2.1.2.2.1.17.x	Counter	RO	The total number of packets that higher-level protocols requested be transmitted to a subnetwork-unicast address, including those that were discarded or not sent.
ifOutNUcastPkts	.1.3.6.1.2.1.2.2.1.18.x	Counter	RO	The total number of packets that higher-level protocols requested be transmitted to a non-unicast (i.e., a subnetwork-broadcast or subnetwork-multicast) address, including those that were discarded or not sent.



a. x is the interface ID

## 4.2 Private MIB Parameters

### 4.2.1 HBS

Table 4-2: Private MIB Parameters - HBS (Sheet 1 of 38)

Name	OID	Type	Access	Description
winlink1000OduAdmProductType	1.3.6.1.4.1.4458.1000.1.1.1	DisplayString	RO	ODU configuration description.
winlink1000OduAdmBroadcast	1.3.6.1.4.1.4458.1000.1.1.10	Integer	RW	This parameter is reserved for the Manager application provided with the product.
winlink1000OduAdmHostsIndex	1.3.6.1.4.1.4458.1000.1.1.12.1.1	Integer	RO	Trap destinations table index.
winlink1000OduAdmHostsIp	1.3.6.1.4.1.4458.1000.1.1.12.1.2	IPAddress	RW	Trap destination IP address. A change is effective immediately.
winlink1000OduAdmHostsPort	1.3.6.1.4.1.4458.1000.1.1.12.1.3	Integer	RW	UDP port of the trap destination. A change is effective immediately.
winlink1000OduAdmHostsSecurityModel	1.3.6.1.4.1.4458.1000.1.1.12.1.4	Integer	RW	Security model used for this trap generation.
winlink1000OduAdmHostsUserName	1.3.6.1.4.1.4458.1000.1.1.12.1.5	DisplayString	RW	User name used to generate the snmpv3 trap.
winlink1000OduAdmHostsPassword	1.3.6.1.4.1.4458.1000.1.1.12.1.6	DisplayString	RW	Password used to generate the snmpv3 trap.
winlink1000OduAdmHostsIPv6	1.3.6.1.4.1.4458.1000.1.1.12.1.7	DisplayString	RW	Trap destination IPv6 address. A change is effective immediately.
winlink1000OduAdmBuzzerAdminState	1.3.6.1.4.1.4458.1000.1.1.13	Integer	RW	This parameter controls the activation of the buzzer while the unit is in install mode. A change is effective immediately. The valid values are: disabled (0) enabledAuto (1) enabledConstantly(2) advancedAuto (3).
winlink1000OduProductId	1.3.6.1.4.1.4458.1000.1.1.14	DisplayString	RO	This parameter is reserved for the Manager application provided with the product.
winlink1000OduReadCommunity	1.3.6.1.4.1.4458.1000.1.1.15	DisplayString	RW	Read Community String. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Read Community String. The SNMP agent accepts only encrypted values.
winlink1000OduReadWriteCommunity	1.3.6.1.4.1.4458.1000.1.1.16	DisplayString	RW	Read/Write Community String. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Read/Write Community String. The SNMP agent accepts only encrypted values.
winlink1000OduTrapCommunity	1.3.6.1.4.1.4458.1000.1.1.17	DisplayString	RW	Trap Community String. This parameter is used by the Manager application to change the Trap Community String. The SNMP agent accepts only encrypted values.
winlink1000OduAdmSnmpAgentVersion	1.3.6.1.4.1.4458.1000.1.1.18	Integer	RO	Major version of the SNMP agent.
winlink1000OduAdmRemoteSiteName	1.3.6.1.4.1.4458.1000.1.1.19	DisplayString	RO	Remote site name. Returns the same value as sysLocation parameter of the remote site.
winlink1000OduAdmHwRev	1.3.6.1.4.1.4458.1000.1.1.2	DisplayString	RO	ODU Hardware Version.
winlink1000OduAdmSnmpAgentMinorVersion	1.3.6.1.4.1.4458.1000.1.1.20	Integer	RO	Minor version of the SNMP agent.
winlink1000OduAdmLinkPassword	1.3.6.1.4.1.4458.1000.1.1.21	DisplayString	RW	Link Password. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Link Password. The SNMP agent accepts only encrypted values.

Table 4-2: Private MIB Parameters - HBS (Sheet 2 of 38)

Name	OID	Type	Access	Description
winlink1000OduAdmSiteLinkPassword	1.3.6.1.4.1.4458.1000.1.1.22	DisplayString	RW	Site Link Password. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Link Password of the site. The SNMP agent accepts only encrypted values.
winlink1000OduAdmDefaultPassword	1.3.6.1.4.1.4458.1000.1.1.23	Integer	RO	This parameter indicates if the current Link Password is the default password.
winlink1000OduAdmConnectionType	1.3.6.1.4.1.4458.1000.1.1.24	Integer	RO	This parameter indicates if the Manager application is connected to the local ODU or to the remote ODU over the air. A value of 'unknown' indicates community string mismatch.
winlink1000OduAdmBackToFactorySettingsCmd	1.3.6.1.4.1.4458.1000.1.1.25	Integer	RW	Back to factory settings Command. A change is effective after reset. The read value is always 0.
winlink1000OduAdmIPParamsCnfg	1.3.6.1.4.1.4458.1000.1.1.26	DisplayString	RW	ODU IP address Configuration. The format is: <IP_Address> <Subnet_Mask> <Default_Gateway>
winlink1000OduAdmVlanID	1.3.6.1.4.1.4458.1000.1.1.27	Integer	RW	VLAN ID. Valid values are 1 to 4094. Initial value is 0 meaning VLAN unaware.
winlink1000OduAdmVlanPriority	1.3.6.1.4.1.4458.1000.1.1.28	Integer	RW	VLAN Priority. 0 is lowest priority 7 is highest priority.
winlink1000OduAdmSN	1.3.6.1.4.1.4458.1000.1.1.29	DisplayString	RO	ODU Serial Number
winlink1000OduAdmSWRev	1.3.6.1.4.1.4458.1000.1.1.3	DisplayString	RO	ODU Software Version.
winlink1000OduAdmProductName	1.3.6.1.4.1.4458.1000.1.1.30	DisplayString	RO	This is the product name as it exists at EC
winlink1000OduAdmActivationKey	1.3.6.1.4.1.4458.1000.1.1.31	DisplayString	RW	Activates a general key.
winlink1000OduAdmRmtPermittedOduType	1.3.6.1.4.1.4458.1000.1.1.32	DisplayString	RW	Mobile Application: permitted partner OduType.
winlink1000OduAdmCPUID	1.3.6.1.4.1.4458.1000.1.1.33	Integer	RO	CPU ID
winlink1000OduAdmOverdCmd	1.3.6.1.4.1.4458.1000.1.1.34	DisplayString	RW	Ability to perform special command in the ODU.
winlink1000OduAdmLinkMode	1.3.6.1.4.1.4458.1000.1.1.35	Integer	RW	Unit PMP operation mode.
winlink1000OduAdmActualConnectMode	1.3.6.1.4.1.4458.1000.1.1.36	Integer	RO	Unit connected as part to ptp or ptmp.
winlink1000OduAdmAES256Support	1.3.6.1.4.1.4458.1000.1.1.37	Integer	RO	AES-256 security support indication.
winlink1000OduAdmAES256State	1.3.6.1.4.1.4458.1000.1.1.38	Integer	RW	Enable/Disable AES-256 security mode over the air link.
winlink1000OduAdmAES256Status	1.3.6.1.4.1.4458.1000.1.1.39	Integer	RO	AES256 operating status
winlink1000OduAdmLinkName	1.3.6.1.4.1.4458.1000.1.1.4	DisplayString	RW	Link Name. A change is effective immediately.
winlink1000OduAdmBatterySavingShutdownTime	1.3.6.1.4.1.4458.1000.1.1.40	Integer	RW	Battery Saving Shutdown Time in minutes 0 till battery run out -1 if not supported.
winlink1000OduAdmWiFiPowerMode	1.3.6.1.4.1.4458.1000.1.1.41	Integer	RW	WIFI unit power mode.
winlink1000OduAdmShutdownTimer	1.3.6.1.4.1.4458.1000.1.1.42	Integer	RO	Shutdown Timer in seconds.
winlink1000OduAdmGPSSState	1.3.6.1.4.1.4458.1000.1.1.43	Integer	RO	GPS state
winlink1000OduAdmTemperatureC	1.3.6.1.4.1.4458.1000.1.1.44	Integer	RO	The temperature (Celsius) inside the Board.

Table 4-2: Private MIB Parameters - HBS (Sheet 3 of 38)

Name	OID	Type	Access	Description
winlink1000OduAdmIPStackMode	1.3.6.1.4.1.4458.1000.1.1.45	Integer	RW	The IP stack mode.
winlink1000OduAdmIPv6ParamsCnfg	1.3.6.1.4.1.4458.1000.1.1.46	DisplayString	RW	ODU IPv6 address Configuration. The format is: <IP_Address> <Subnet_Mask> <Default_Gateway>
winlink1000OduAdmIPv6Address	1.3.6.1.4.1.4458.1000.1.1.47	DisplayString	RO	ODU IPv6 address.
winlink1000OduAdmIPv6Prefix	1.3.6.1.4.1.4458.1000.1.1.48	Integer	RO	ODU IPv6 subnet mask.
winlink1000OduAdmIPv6DefaultGateWay	1.3.6.1.4.1.4458.1000.1.1.49	DisplayString	RO	ODU IPv6 default gateway.
winlink1000OduAdmResetCmd	1.3.6.1.4.1.4458.1000.1.1.5	Integer	RW	Reset Command. A set command with a value of 3 will cause a device reset. HBS only: A set command with a value of 4 will cause a device reset for the entire sector. The read value is always 0.
winlink1000OduAdmPowerConsumption	1.3.6.1.4.1.4458.1000.1.1.50	Integer	RO	Power Consumption (mWatt)
winlink1000OduAdmWifiChannel	1.3.6.1.4.1.4458.1000.1.1.51.1	Integer	RW	Wifi Channel
winlink1000OduAdmWifiAPStatus	1.3.6.1.4.1.4458.1000.1.1.51.10	Integer	RO	Wifi AP Status
winlink1000OduAdmWifiTxPower	1.3.6.1.4.1.4458.1000.1.1.51.2	Integer	RW	Wifi TX Power
winlink1000OduAdmWifiSSID	1.3.6.1.4.1.4458.1000.1.1.51.3	DisplayString	RO	Wifi SSID
winlink1000OduAdmWifiSecurityType	1.3.6.1.4.1.4458.1000.1.1.51.4	Integer	RO	Wifi Security type
winlink1000OduAdmWifiPassword	1.3.6.1.4.1.4458.1000.1.1.51.5	DisplayString	RW	Wifi Password
winlink1000OduAdmWifiNetwork	1.3.6.1.4.1.4458.1000.1.1.51.6	IPAddress	RW	Wifi Network
winlink1000OduAdmWifiRssi	1.3.6.1.4.1.4458.1000.1.1.51.7	Integer	RO	Wifi RSSI
winlink1000OduAdmWifiStationMAC	1.3.6.1.4.1.4458.1000.1.1.51.8	DisplayString	RO	Wifi Station MAC
winlink1000OduAdmWifiRestart	1.3.6.1.4.1.4458.1000.1.1.51.9	Integer	RW	A set command with a value of 1 will cause a Wifi restart. The read value is always 0.
winlink1000OduAdmBSAOperationMode	1.3.6.1.4.1.4458.1000.1.1.52	Integer	RO	BSA Operation Mode
winlink1000OduAdmMngConnection	1.3.6.1.4.1.4458.1000.1.1.53	DisplayString	RW	Management Connection
winlink1000OduAdm1588TCSupport	1.3.6.1.4.1.4458.1000.1.1.54	Integer	RO	Indicates that 1588TC license activated
winlink1000OduAdmSyncESupport	1.3.6.1.4.1.4458.1000.1.1.55	Integer	RO	Indicates that SyncE license activated
winlink1000OduAdmRadioRev	1.3.6.1.4.1.4458.1000.1.1.56	DisplayString	RO	Radio Revision
winlink1000OduAdmProductRev	1.3.6.1.4.1.4458.1000.1.1.57	DisplayString	RO	Product Revision
winlink1000OduAdmManagerDownloadURL	1.3.6.1.4.1.4458.1000.1.1.59	DisplayString	RW	This is the URL from which management tool can be downloaded
winlink1000OduAdmAddress	1.3.6.1.4.1.4458.1000.1.1.6	IPAddress	RW	ODU IP address. A change is effective after reset. The parameter is kept for backward compatibility. Using the alternative parameter: winlink1000OduAdmIpParamsCnfg is recommended.
winlink1000OduAdmAntennaDescription	1.3.6.1.4.1.4458.1000.1.1.60	DisplayString	RO	The is a description of the antenna connected to the ODU

Table 4-2: Private MIB Parameters - HBS (Sheet 4 of 38)

Name	OID	Type	Access	Description
winlink1000OduAdmSwCapabilities	1.3.6.1.4.1.4458.1000.1.1.61	DisplayString	RO	This is used to describe which Software Capabilities the current ODU supports
winlink1000OduAdmMask	1.3.6.1.4.1.4458.1000.1.1.7	IPAddress	RW	ODU Subnet Mask. A change is effective after reset. The parameter is kept for backward compatibility. Using the alternative parameter: winlink1000OduAdmIpParamsCnfg is recommended.
winlink1000OduAdmGateway	1.3.6.1.4.1.4458.1000.1.1.8	IPAddress	RW	ODU default gateway. A change is effective after reset. The parameter is kept for backward compatibility. Using the alternative parameter: winlink1000OduAdmIpParamsCnfg is recommended.
winlink1000OduSrvMode	1.3.6.1.4.1.4458.1000.1.2.1	Integer	RW	System mode. The only values that can be set are installMode and slaveMode; normalMode reserved to the Manager application provided with the product. A change is effective after link re-synchronization.
winlink1000OduSrvBridging	1.3.6.1.4.1.4458.1000.1.2.3	Integer	RO	Bridging Mode. Valid values are: disabled (0) enabled (1).
winlink1000OduServiceVlanProviderListTPIDstr	1.3.6.1.4.1.4458.1000.1.2.6.8	DisplayString	RO	Holds the possible Provider TPIDs.
winlink1000OduEthernetRemainingRate	1.3.6.1.4.1.4458.1000.1.3.1	Integer	RO	Current Ethernet bandwidth in bps.
winlink1000OduEthernetIfIndex	1.3.6.1.4.1.4458.1000.1.3.2.1.1	Integer	RO	ODU Ethernet Interface Index.
winlink1000OduEthernetIf1588v2PTPEventTXRate	1.3.6.1.4.1.4458.1000.1.3.2.1.10	Integer	RO	For debug use
winlink1000OduEthernetIfAddress	1.3.6.1.4.1.4458.1000.1.3.2.1.5	DisplayString	RO	ODU MAC address.
winlink1000OduEthernetIfAdminStatus	1.3.6.1.4.1.4458.1000.1.3.2.1.6	Integer	RW	Required state of the interface.
winlink1000OduEthernetIfOperStatus	1.3.6.1.4.1.4458.1000.1.3.2.1.7	Integer	RO	Current operational state of the interface.
winlink1000OduEthernetIfFailAction	1.3.6.1.4.1.4458.1000.1.3.2.1.8	Integer	RW	Failure action of the interface.
winlink1000OduEthernetIf1588v2PTPEventRXRate	1.3.6.1.4.1.4458.1000.1.3.2.1.9	Integer	RO	For debug use
winlink1000OduEthernetNumOfPorts	1.3.6.1.4.1.4458.1000.1.3.3	Integer	RO	Number of ODU network interfaces.
winlink1000OduEthernetGbeSupported	1.3.6.1.4.1.4458.1000.1.3.4	Integer	RO	read-only
winlink1000OduEthernetSfpProperties	1.3.6.1.4.1.4458.1000.1.3.5	DisplayString	RO	Sfp port properties.
winlink1000OduBridgeTpMode	1.3.6.1.4.1.4458.1000.1.4.4.101	Integer	RW	ODU bridge mode. A change is effective after reset. Valid values: hubMode (0) bridgeMode (1).
winlink1000OduBridgeConfigMode	1.3.6.1.4.1.4458.1000.1.4.4.102	Integer	RO	ODU bridge configuration mode
winlink1000OduBridgeTpPortIndex	1.3.6.1.4.1.4458.1000.1.4.4.3.1.1	Integer	RO	ODU Transparent Bridge Port Number.
winlink1000OduBridgeTpPortInBytes	1.3.6.1.4.1.4458.1000.1.4.4.3.1.101	Counter	RO	Number of bytes received by this port.
winlink1000OduBridgeTpPortOutBytes	1.3.6.1.4.1.4458.1000.1.4.4.3.1.102	Counter	RO	Number of bytes transmitted by this port.
winlink1000OduBridgeTpPortInFrames	1.3.6.1.4.1.4458.1000.1.4.4.3.1.3	Counter	RO	Number of frames received by this port.
winlink1000OduBridgeTpPortOutFrames	1.3.6.1.4.1.4458.1000.1.4.4.3.1.4	Counter	RO	Number of frames transmitted by this port.

Table 4-2: Private MIB Parameters - HBS (Sheet 5 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirFreq	1.3.6.1.4.1.4458.1000.1.5.1	Integer	RW	Installation Center Frequency. Valid values are product dependent. A change is effective after link re-synchronization.
winlink1000OduAirTxPower36	1.3.6.1.4.1.4458.1000.1.5.10	Integer	RW	Deprecated parameter. Actual behavior is read-only.
winlink1000OduAirTxPower48	1.3.6.1.4.1.4458.1000.1.5.11	Integer	RW	Deprecated parameter. Actual behavior is read-only.
winlink1000OduAirCurrentTxPower	1.3.6.1.4.1.4458.1000.1.5.12	Integer	RO	Current Transmit Power in dBm. This is a nominal value while the actual transmit power includes additional attenuation.
winlink1000OduAirMinFrequency	1.3.6.1.4.1.4458.1000.1.5.13	Integer	RO	Minimum center frequency in MHz.
winlink1000OduAirMaxFrequency	1.3.6.1.4.1.4458.1000.1.5.14	Integer	RO	Maximum center frequency in MHz.
winlink1000OduAirFreqResolution	1.3.6.1.4.1.4458.1000.1.5.15	Integer	RO	Center Frequency resolution. Measured in MHz if value < 100 otherwise in KHz.
winlink1000OduAirCurrentFreq	1.3.6.1.4.1.4458.1000.1.5.16	Integer	RO	Current Center Frequency. Measured in MHz if center frequency resolution value < 100 otherwise in KHz.
winlink1000OduAirNumberOfChannels	1.3.6.1.4.1.4458.1000.1.5.17	Integer	RO	Number of channels that can be used.
winlink1000OduAirDfsState	1.3.6.1.4.1.4458.1000.1.5.19	Integer	RO	Radar detection state. Valid values: disabled (0) enabled (1).
winlink1000OduAirDesiredRate	1.3.6.1.4.1.4458.1000.1.5.2	Integer	RW	Deprecated parameter actual behavior is read-only. Required Air Rate. For Channel Bandwidth of 20 10 5 MHz divide the value by 1 2 4 respectively.
winlink1000OduAirAutoChannelSelectionState	1.3.6.1.4.1.4458.1000.1.5.20	Integer	RO	Deprecated parameter. Indicating Automatic Channel Selection availability at current channel bandwidth. Valid values: disabled (0) enabled (1).
winlink1000OduAirEnableTxPower	1.3.6.1.4.1.4458.1000.1.5.21	Integer	RO	Indicating Transmit power configuration enabled or disabled.
winlink1000OduAirMinTxPower	1.3.6.1.4.1.4458.1000.1.5.22	Integer	RO	Minimum Transmit power in dBm.
winlink1000OduAirMaxTxPowerIndex	1.3.6.1.4.1.4458.1000.1.5.23.1.1	Integer	RO	Air interface rate index.
winlink1000OduAirMaxTxPower	1.3.6.1.4.1.4458.1000.1.5.23.1.2	Integer	RO	Maximum Transmit power in dBm.
winlink1000OduAirChannelBandwidth	1.3.6.1.4.1.4458.1000.1.5.24	Integer	RW	Channel bandwidth in KHz. A change is effective after reset.
winlink1000OduAirChannelBWIndex	1.3.6.1.4.1.4458.1000.1.5.25.1.1	Integer	RO	Channel Bandwidth index.
winlink1000OduAirChannelBWAvail	1.3.6.1.4.1.4458.1000.1.5.25.1.2	Integer	RO	Channel Bandwidth availability product specific. Options are: Not supported supported with manual channel selection supported with Automatic Channel Selection.
winlink1000OduAirChannelsAdminState	1.3.6.1.4.1.4458.1000.1.5.25.1.3	DisplayString	RO	Channels' availability per CBW.
winlink1000OduAirChannelBWHSSATDDConflictPerCBW	1.3.6.1.4.1.4458.1000.1.5.25.1.4	Integer	RO	Indication for possible Link drop per CBW due to conflict between HSS and ATDD.
winlink1000OduAirChannelBWMinRatioForSupporting	1.3.6.1.4.1.4458.1000.1.5.25.1.5	Integer	RO	Minimal TX ratio that may be used by the HSM and still enable proper operation of the aforementioned CBW.
winlink1000OduAirChannelBWMaxRatioForSupporting	1.3.6.1.4.1.4458.1000.1.5.25.1.6	Integer	RO	Maximal TX ratio that may be used by the HSM and still enable proper operation of the aforementioned CBW.
winlink1000OduAirRFD	1.3.6.1.4.1.4458.1000.1.5.26	Integer	RO	Current radio frame duration in microseconds.



Table 4-2: Private MIB Parameters - HBS (Sheet 6 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirDesiredRateIdx	1.3.6.1.4.1.4458.1000.1.5.28	Integer	RW	Required Air Rate index. 0 reserved for Adaptive Rate. A change is effective immediately after Set operation to the master side while the link is up.
winlink1000OduAirLinkDistance	1.3.6.1.4.1.4458.1000.1.5.29	Integer	RO	Link distance in meters. A value of -1 indicates an illegal value and is also used when a link is not established.
winlink1000OduAirSSID	1.3.6.1.4.1.4458.1000.1.5.3	DisplayString	RW	Reserved for the Manager application provided with the product. The Sector ID in Point-To-Multi-Point systems.
winlink1000OduAirLinkWorkingMode	1.3.6.1.4.1.4458.1000.1.5.30	Integer	RO	Link working mode as a result of comparing versions of both sides of the link. Possible modes are: Unknown - no link Normal - versions on both sides are identical with full compatibility with restricted compatibility or versions on both sides are different with software upgrade or versions incompatibility.
winlink1000OduAirMajorLinkIfVersion	1.3.6.1.4.1.4458.1000.1.5.31	Integer	RO	Major link interface version
winlink1000OduAirMinorLinkIfVersion	1.3.6.1.4.1.4458.1000.1.5.32	Integer	RO	Minor link interface version
winlink1000OduAirTxPower	1.3.6.1.4.1.4458.1000.1.5.4	Integer	RW	Required Transmit power in dBm. This is a nominal value while the actual transmit power includes additional attenuation. The min and max values are product specific. A change is effective immediately.
winlink1000OduAirHssDesiredOpState	1.3.6.1.4.1.4458.1000.1.5.40.1	Integer	RW	Required Hub Site Synchronization operating state. For HssSyncUnits : For hssISU :[2 7] For hssGSU :[2 6] For HBS: [2 3 4 5]
winlink1000OduAirHssTime	1.3.6.1.4.1.4458.1000.1.5.40.10	DisplayString	RO	Hub Site Synchronization GPS time
winlink1000OduAirHssLatitude	1.3.6.1.4.1.4458.1000.1.5.40.11	DisplayString	RO	Hub Site Synchronization GPS Latitude
winlink1000OduAirHssNSIndicator	1.3.6.1.4.1.4458.1000.1.5.40.12	DisplayString	RO	Hub Site Synchronization GPS N/S Indicator
winlink1000OduAirHssLongitude	1.3.6.1.4.1.4458.1000.1.5.40.13	DisplayString	RO	Hub Site Synchronization GPS Longitude
winlink1000OduAirHssEWIndicator	1.3.6.1.4.1.4458.1000.1.5.40.14	DisplayString	RO	Hub Site Synchronization GPS E/W Indicator
winlink1000OduAirHssNumSatellites	1.3.6.1.4.1.4458.1000.1.5.40.15	DisplayString	RO	Hub Site Synchronization GPS Number of satellites
winlink1000OduAirHssAltitude	1.3.6.1.4.1.4458.1000.1.5.40.16	DisplayString	RO	Hub Site Synchronization GPS Altitude
winlink1000OduAirHssRfpPhase	1.3.6.1.4.1.4458.1000.1.5.40.17	Integer	RW	Hub Site Synchronization GPS RFP phase
winlink1000OduAirHssInterSiteSynchronizationMode	1.3.6.1.4.1.4458.1000.1.5.40.18	Integer	RW	Inter-Site Synchronization Mode - independent / synchronized
winlink1000OduAirHssInterSiteSynchronizationAvailability	1.3.6.1.4.1.4458.1000.1.5.40.19	Integer	RO	Inter-Site Synchronization Availability
winlink1000OduAirHssCurrentOpState	1.3.6.1.4.1.4458.1000.1.5.40.2	Integer	RO	Current Hub Site Synchronization operating state.
winlink1000OduAirHssDomainID	1.3.6.1.4.1.4458.1000.1.5.40.21	DisplayString	RW	EHSS domain. Identify set of CUs with same HSS synchronization
winlink1000OduAirHssSupportedSynchronizationProtocol	1.3.6.1.4.1.4458.1000.1.5.40.22	Integer	RO	Supported Synchronization Protocols
winlink1000OduAirHssDesiredSynchronizationProtocol	1.3.6.1.4.1.4458.1000.1.5.40.23	Integer	RW	Desired Synchronization Protocols



Table 4-2: Private MIB Parameters - HBS (Sheet 7 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirHssDiscover	1.3.6.1.4.1.4458.1000.1.5.40.24	Integer	RW	Initiate Discovery process of ODUs on the network.
winlink1000OduAirHssNumberOfDiscoveredODUs	1.3.6.1.4.1.4458.1000.1.5.40.25	Integer	RO	Number OF Discovered ODUs in network.
winlink1000OduAirHssMasterSlaveCompatibility	1.3.6.1.4.1.4458.1000.1.5.40.27	Integer	RO	EHSM version compatibility. Relevant to Ethernet HSS Clients only.
winlink1000OduAirHssNumberOfAssociatedCUs	1.3.6.1.4.1.4458.1000.1.5.40.28	Integer	RO	Number of associated Ethernet HSS Clients. Relevant to Ethernet HSS Masters only
winlink1000OduAirHssSyncStatus	1.3.6.1.4.1.4458.1000.1.5.40.3	Integer	RO	Hub Site Synchronization sync status.
winlink1000OduAirHssSyncStatusEth	1.3.6.1.4.1.4458.1000.1.5.40.30	Integer	RO	Ethernet HSS Client Synchronization Level
winlink1000OduAirHssEthVLANTag	1.3.6.1.4.1.4458.1000.1.5.40.31	Integer	RW	Ethernet HSS VLAN Tag: The least significant decimal digit is the VLAN Priority(0-6) and the rest of the digits represents VLAN ID (2-4094)
winlink1000OduAirHssHSMIPAddress	1.3.6.1.4.1.4458.1000.1.5.40.32	IPAddress	RO	HSMs IP address. Relevant for HSC synchronized over Ethernet.
winlink1000OduAirHssDelayToHSM	1.3.6.1.4.1.4458.1000.1.5.40.33	Integer	RO	Delay in microseconds to HSM. Relevant for HSC synchronized over Ethernet.
winlink1000OduAirHssSyncAcquisitionSeconds	1.3.6.1.4.1.4458.1000.1.5.40.34	Integer	RW	Accumulated quantity of seconds in clock acquisition while connected to current HSM
winlink1000OduAirHssHSMIPv6Address	1.3.6.1.4.1.4458.1000.1.5.40.35	DisplayString	RO	HSMs IPv6 address. Relevant for HSC synchronized over Ethernet.
winlink1000OduAirHssExtPulseStatus	1.3.6.1.4.1.4458.1000.1.5.40.4	Integer	RO	Hub Site Synchronization external pulse detection status. In GSS mode: if generating then 1PSP is auto generated by the GSS Unit. if generatingAndDetecting then 1PSP is generated by GPS satellites signal.
winlink1000OduAirHssExtPulseType	1.3.6.1.4.1.4458.1000.1.5.40.5	Integer	RO	Hub Site Synchronization external pulse type.
winlink1000OduAirHssDesiredExtPulseType	1.3.6.1.4.1.4458.1000.1.5.40.6	Integer	RW	Hub Site Synchronization required external pulse type. Valid values for read write: {typeA(2) typeB(3) typeC(4) typeD(5) typeE(6) typeF(7)}. Valid value for read only: {notApplicable(1)}.
winlink1000OduAirHssRfpIndex	1.3.6.1.4.1.4458.1000.1.5.40.7.1.1	Integer	RO	ODU RFP Table index. The index represent the Radio Frame Pattern: typeA(2) typeB(3) typeC(4) typeD(5) typeE(6) typeF(7).
winlink1000OduAirHssRfpEthChannelBW80MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.10	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 80MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW7MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.11	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 7MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW14MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.12	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 14MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW5MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.2	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 5MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW10MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.4	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 10MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW20MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.6	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 20MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW40MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.8	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 40MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpStr	1.3.6.1.4.1.4458.1000.1.5.40.8	DisplayString	RO	Hub Site Synchronization supported patterns
winlink1000OduAirHssHsmID	1.3.6.1.4.1.4458.1000.1.5.40.9	Integer	RO	A unique ID which is common to the HSM and all its collocated ODUs

Table 4-2: Private MIB Parameters - HBS (Sheet 8 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirLockRemote	1.3.6.1.4.1.4458.1000.1.5.41	Integer	RW	This parameter enables locking the link with a specific ODU. The following values can be set: Unlock (default) - The ODU is not locked on a specific remote ODU. Unlock can only be performed when the link is not connected. Lock - The ODU is locked on a specific remote ODU. Lock can only be performed when the link is active.
winlink1000OduAirAntennaGain	1.3.6.1.4.1.4458.1000.1.5.42	Integer	RW	Current Antenna Gain in 0.1 dBi resolution. User defined value for external antenna. Legal range: MinAntennaGain<AntennaGain<MaxAntennaGain.
winlink1000OduAirFeederLoss	1.3.6.1.4.1.4458.1000.1.5.43	Integer	RW	Current Feeder Loss in 0.1 dBm resolution. User defined value for external antenna.
winlink1000OduAirMaxAntennaGain	1.3.6.1.4.1.4458.1000.1.5.44	Integer	RO	Maximum allowed Antenna Gain in 0.1 dBi resolution.
winlink1000OduAirMinAntennaGain	1.3.6.1.4.1.4458.1000.1.5.45	Integer	RO	Minimum allowed Antenna Gain in 0.1 dBi resolution.
winlink1000OduAirMaxEIRP	1.3.6.1.4.1.4458.1000.1.5.46	Integer	RO	Maximum EIRP value as defined by regulation in 0.1 dBm resolution.
winlink1000OduAirAntennaGainConfigSupport	1.3.6.1.4.1.4458.1000.1.5.47	Integer	RO	Antenna Gain Configurability options are product specific: supported not supported.
winlink1000OduAirAntennaType	1.3.6.1.4.1.4458.1000.1.5.48	Integer	RW	External Antenna Type: Monopolar or Bipolar.
winlink1000OduAirRssBalance	1.3.6.1.4.1.4458.1000.1.5.49	Integer	RO	RSS balance. Relation between RSS in radio 1 and RSS in radio 2. -2 : Radio 2 RSS is much stronger than Radio 1 RSS. -1 : Radio 2 RSS is stronger than Radio 1 RSS. -0 : Radio 2 RSS is equal to Radio 1 RSS. 1 : Radio 1 RSS is stronger than Radio 2 RSS. 2 : Radio 1 RSS is much stronger than Radio 2 RSS.
winlink1000OduAirSessionState	1.3.6.1.4.1.4458.1000.1.5.5	Integer	RO	Current Link State. The value is active (3) during normal operation.
winlink1000OduAirTotalTxPower	1.3.6.1.4.1.4458.1000.1.5.50	Integer	RO	Total Transmit Power in dBm. This is a nominal value While the actual transmit power includes additional attenuation.
winlink1000OduAirInstallationFreqAndCBW	1.3.6.1.4.1.4458.1000.1.5.51	DisplayString	RW	Installation frequency Channel BW. Relevant in point to point systems.
winlink1000OduAirDFSType	1.3.6.1.4.1.4458.1000.1.5.52	Integer	RO	DFS regulation type.
winlink1000OduAirComboSubBandIndex	1.3.6.1.4.1.4458.1000.1.5.53.1.1.1	Integer	RO	ODU Multi-band sub bands table index.
winlink1000OduAirComboSubBandChannelBW20AdminState	1.3.6.1.4.1.4458.1000.1.5.53.1.1.10	DisplayString	RO	Reflects the CBW 20MHz admin state vector.
winlink1000OduAirComboSubBandChannelBW40AdminState	1.3.6.1.4.1.4458.1000.1.5.53.1.1.11	DisplayString	RO	Reflects the CBW 40MHz admin state vector.
winlink1000OduAirComboSubBandAllowableChannels	1.3.6.1.4.1.4458.1000.1.5.53.1.1.12	DisplayString	RO	Reflects the allowable channels vector.
winlink1000OduAirComboSubBandChannelBWAvailability	1.3.6.1.4.1.4458.1000.1.5.53.1.1.13	DisplayString	RO	Reflects the available CBWs vector.
winlink1000OduAirComboSubBandChannelBandwidth	1.3.6.1.4.1.4458.1000.1.5.53.1.1.14	Integer	RO	Reflects the sub-band default channel bandwidth.
winlink1000OduAirComboSubBandMinimalFreq	1.3.6.1.4.1.4458.1000.1.5.53.1.1.15	Integer	RO	Reflects the sub-band default minimal frequency.
winlink1000OduAirComboSubBandMaximalFreq	1.3.6.1.4.1.4458.1000.1.5.53.1.1.16	Integer	RO	Reflects the sub-band default maximal frequency.

Table 4-2: Private MIB Parameters - HBS (Sheet 9 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirCom boSubBandFrequencyRe solution	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.17	Integer	RO	Reflects the sub-band frequency resolution.
winlink1000OduAirCom boSubBandDefaultChan nelList	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.18	DisplayString	RO	Reflects the default channel list vector.
winlink1000OduAirCom boSubBandDfsState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.19	Integer	RO	Reflects the sub-band DFS state.
winlink1000OduAirCom boSubBandId	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.2	DisplayString	RO	Represents the Multi-band sub band ID.
winlink1000OduAirCom boSubBandChannelBW8 0AdminState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.20	DisplayString	RO	Reflects the CBW 80MHz admin state vector.
winlink1000OduAirCom boSubBandChannelBW7 AdminState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.21	DisplayString	RO	Reflects the CBW 7MHz admin state vector.
winlink1000OduAirCom boSubBandChannelBW1 4AdminState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.22	DisplayString	RO	Reflects the CBW 80MHz admin state vector.
winlink1000OduAirCom boSubBandDescription	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.3	DisplayString	RO	Multi-band sub band description.
winlink1000OduAirCom boSubBandInstallFreq	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.4	Integer	RO	Represents the Multi-band sub band installation frequency in KHz.
winlink1000OduAirCom boSubBandAdminState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.5	Integer	RO	Represents the Multi-band sub band administrative state.
winlink1000OduAirCom boSubBandInstallationAl lowed	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.6	Integer	RO	Reflects if the Multi-band sub band allows installtion.
winlink1000OduAirCom boFrequencyBandId	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.7	Integer	RO	Reflects the frequency band Id.
winlink1000OduAirCom boSubBandChannelBW5 AdminState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.8	DisplayString	RO	Reflects the CBW 5MHz admin state vector.
winlink1000OduAirCom boSubBandChannelBW1 0AdminState	1.3.6.1.4.1.4458.1000. 1.5.53.1.1.9	DisplayString	RO	Reflects the CBW 10MHz admin state vector.
winlink1000OduAirCom boNumberOfSubBands	1.3.6.1.4.1.4458.1000. 1.5.53.2	Integer	RO	Represents the number of Multi-band sub bands.
winlink1000OduAirCom boSwitchSubBand	1.3.6.1.4.1.4458.1000. 1.5.53.3	DisplayString	RW	Switch sub band operation with a given sub band ID. The get operation retrieves the current sub band ID.
winlink1000OduAirCom boCurrentSubBandDesc	1.3.6.1.4.1.4458.1000. 1.5.53.4	DisplayString	RO	Current Sub Band description.
winlink1000OduAirCom boCurrentFrequencyBan dId	1.3.6.1.4.1.4458.1000. 1.5.53.5	Integer	RO	Current Frequency Band Id Number.
winlink1000OduAirInter nalMaxRate	1.3.6.1.4.1.4458.1000. 1.5.54	Integer	RO	Max Ethernet throughput of the site (in Kpbs).
winlink1000OduAirSpec trumAnalysisOperState	1.3.6.1.4.1.4458.1000. 1.5.56.1	Integer	RW	Spectrum Analysis operation state. The configurable values are Spectrum Analysis Stop Start and Restart. Not Supported value indicates that the feature is not supported on the device. Not Supported is not a configurable state.
winlink1000OduAirRxPo werAntennaA	1.3.6.1.4.1.4458.1000. 1.5.56.2	Integer	RO	Received Signal Strength in dBm of Antenna A.
winlink1000OduAirRxPo werAntennaB	1.3.6.1.4.1.4458.1000. 1.5.56.3	Integer	RO	Received Signal Strength in dBm of Antenna B.
winlink1000OduAirNum berOfSpectrumChannels	1.3.6.1.4.1.4458.1000. 1.5.56.4	Integer	RO	Represents the number of Spectrum Channels.

Table 4-2: Private MIB Parameters - HBS (Sheet 10 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirSpec trumChannelIndex	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.1	Integer	RO	ODU Spectrum Channel index.
winlink1000OduAirSpec trumChannelMaxNFAnt ennaB	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.10	Integer	RO	Max normalized Noise Floor value in dBm - of Antenna B - over all dwells.
winlink1000OduAirSpec trumChannelCACPerfor med	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.11	Integer	RO	read-only
winlink1000OduAirSpec trumChannelLastCACTi mestamp	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.12	TimeTicks	RO	Last CAC performed timestamp in hundredths of a second since device up time. If no CAC has performed on the channel the return value will be 0.
winlink1000OduAirSpec trumChannelRadarDete cted	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.13	Integer	RO	read-only
winlink1000OduAirSpec trumChannelRadarDete ctionTimestamp	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.14	TimeTicks	RO	Last Radar Detection timestamp in hundredths of a second since device up time. If no Radar has detected on the channel the return value will be 0.
winlink1000OduAirSpec trumChannelAvailable	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.15	Integer	RO	read-only
winlink1000OduAirSpec trumChannelMaxBeaco nRss	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.16	Integer	RO	The max RSS value of a received beacon on the specific channel in dBm.
winlink1000OduAirSpec trumChannelComprese d	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.17	OctetString	RO	Compress all the Spectrum data per channel into one variable. Frequency (4 bytes) Scanned (1 byte) Timestamp (4 bytes) Last NF Antenna A (1 byte) Last NF Antenna B (1 byte) Avg NF Antenna A (1 byte) Avg NF Antenna B (1 byte) Max NF Antenna A (1 byte) Max NF Antenna B (1 byte) CAC Performed (1 byte) Last CAC Timestamp (4 bytes) Radar Detected (1 byte) Radar Detected Timestamp (4 bytes) Channel Available (1 byte) Max Beacon RSS (1 byte).
winlink1000OduAirSpec trumChannelFrequency	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.2	Integer	RO	ODU Spectrum Channel frequency in MHz.
winlink1000OduAirSpec trumChannelScanned	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.3	Integer	RO	read-only
winlink1000OduAirSpec trumChannelScanningTi mestamp	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.4	TimeTicks	RO	Channel last scan timestamp in hundredths of a second since device up time. If the channel was not scanned than the return value will be 0.
winlink1000OduAirSpec trumChannelLastNFAnte nnaA	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.5	Integer	RO	Normalized Noise Floor value in dBm - of Antenna A - (including 2 neighbor frequencies).
winlink1000OduAirSpec trumChannelLastNFAnte nnaB	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.6	Integer	RO	Normalized Noise Floor value in dBm - of Antenna B - (including 2 neighbor frequencies).
winlink1000OduAirSpec trumChannelAverageNF AntennaA	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.7	Integer	RO	Average normalized Noise Floor value in dBm - of Antenna A - over all dwells.
winlink1000OduAirSpec trumChannelAverageNF AntennaB	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.8	Integer	RO	Average normalized Noise Floor value in dBm - of Antenna B - over all dwells.
winlink1000OduAirSpec trumChannelMaxNFAnt ennaA	1.3.6.1.4.1.4458.1000. 1.5.56.5.1.9	Integer	RO	Max normalized Noise Floor value in dBm - of Antenna A - over all dwells.
winlink1000OduAirChip MinMaxFreq	1.3.6.1.4.1.4458.1000. 1.5.56.6	DisplayString	RO	The minimum and maximum frequencies in MHz which the chip supports.
winlink1000OduAirAntC onfAndRatesStatus	1.3.6.1.4.1.4458.1000. 1.5.57	Integer	RO	Description: Antenna configuration and Rates status (1 = Single antenna with single data stream 2 = Dual antenna with single data stream 3 = Dual antenna with dual data stream).

Table 4-2: Private MIB Parameters - HBS (Sheet 11 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirDualAntTxMode	1.3.6.1.4.1.4458.1000.1.5.58	Integer	RW	Description: Transmission type when using Dual radios (MIMO or AdvancedDiversity using one stream of data).
winlink1000OduAirTxOperationMode	1.3.6.1.4.1.4458.1000.1.5.59	Integer	RW	This parameter controls the Operation mode of frames sent over the air. The Operation mode is either normal (1) for regular transmission where frame size is determined by the traffic or throughput test (2) when the user requests an actual over the air throughput estimation using full frames. The latter lasts no more than a predetermined interval (default 30 sec).
winlink1000OduAirMstrSlv	1.3.6.1.4.1.4458.1000.1.5.6	Integer	RO	This parameter indicates if the device was automatically selected into the radio link master or slave. The value is undefined if there is no link. The value is relevant only for point to point systems.
winlink1000OduAirDesiredNetMasterTxRatio	1.3.6.1.4.1.4458.1000.1.5.60.1	Integer	RW	This parameter is reserved to the element manager provided with the product.
winlink1000OduAirCurrentNetMasterTxRatio	1.3.6.1.4.1.4458.1000.1.5.60.2	Integer	RO	Represents the actual Net Master Tx Ratio.
winlink1000OduAirMinUsableMasterTxRatio	1.3.6.1.4.1.4458.1000.1.5.60.3	Integer	RO	Represents the minimal value the user can configure for Desired net mAsTer Tx Ratio.
winlink1000OduAirMaxUsableMasterTxRatio	1.3.6.1.4.1.4458.1000.1.5.60.4	Integer	RO	Represents the maximal value the user can configure for Desired net mAsTer Tx Ratio.
winlink1000OduAirAccumulatedUAS	1.3.6.1.4.1.4458.1000.1.5.61	Integer	RO	Accumulates the Unavailable seconds of the Air Interface. Relevant for point to point systems.
winlink1000OduAirDistStr	1.3.6.1.4.1.4458.1000.1.5.62	DisplayString	RO	Possibilities of the link according to RFP and CBW
winlink1000OduAirChannelsDefaultFreqStr	1.3.6.1.4.1.4458.1000.1.5.63	DisplayString	RO	A string representing the channels available. Each character represents one frequency when '1' means its available and '0' means its not.
winlink1000OduAirAntConnectionType	1.3.6.1.4.1.4458.1000.1.5.64	Integer	RW	Antenna connection type (External(1) Integrated(2) Embedded_External(3) Embedded_Integrated(4) Integrated_BSA(5)).
winlink1000OduAirAllowableChannelsStr	1.3.6.1.4.1.4458.1000.1.5.65	DisplayString	RW	A string representing the allowable channels. Each character represents one channel when '1' means its available and '0' means its not.
winlink1000OduAirDfsAlgorithmTypeState	1.3.6.1.4.1.4458.1000.1.5.66.1	Integer	RW	Bitmap for state of Radar Algorithm Type. Filters by bit's position: 0 = Zero PW 1 = Fixed 2 = Variable 3 = Staggered 4 = Long.
winlink1000OduAirDfsLastDetectedIndex	1.3.6.1.4.1.4458.1000.1.5.66.2.1.1	Integer	RO	Dfs Last Detected Radars Table Index.
winlink1000OduAirDfsLastDetectedTime	1.3.6.1.4.1.4458.1000.1.5.66.2.1.2	TimeTicks	RO	Dfs time of the last detected radar.
winlink1000OduAirDfsLastDetectedAlgorithmType	1.3.6.1.4.1.4458.1000.1.5.66.2.1.3	Integer	RO	Dfs type of the last detected radar.
winlink1000OduAirDfsLastDetectedFrequency	1.3.6.1.4.1.4458.1000.1.5.66.2.1.4	Integer	RO	Dfs frequency of the last detected radar.
winlink1000OduAirGeolocation	1.3.6.1.4.1.4458.1000.1.5.69	DisplayString	RW	Geographic device location in format: latitude longitude.
winlink1000OduAirAggregateCapacity	1.3.6.1.4.1.4458.1000.1.5.70	Integer	RO	Aggregate Capacity of the ODU in Mbps.
winlink1000OduAirCurrentManualAngle	1.3.6.1.4.1.4458.1000.1.5.72	Integer	RO	Absolute (manual) angle (Deg.) of the unit.
winlink1000OduAirCurrentManualElevAngle	1.3.6.1.4.1.4458.1000.1.5.73	Integer	RO	Absolute Elevation angle (Deg.) of the unit.
winlink1000OduAirAntennaTemperatureC	1.3.6.1.4.1.4458.1000.1.5.74	Integer	RO	Antenna Temperature (C)



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Name	OID	Type	Access	Description
winlink1000OduAirGPSAntennaType	1.3.6.1.4.1.4458.1000.1.5.75	Integer	RW	GPS Antenna type.
winlink1000OduAirResync	1.3.6.1.4.1.4458.1000.1.5.8	Integer	RW	Setting this parameter to 1 will cause the link to restart the synchronization process.
winlink1000OduAirRxPower	1.3.6.1.4.1.4458.1000.1.5.9.1	Integer	RO	Received Signal Strength in dBm. Relevant only for point to point systems.
winlink1000OduAirTotalFrames	1.3.6.1.4.1.4458.1000.1.5.9.2	Counter	RO	Total number of radio frames.
winlink1000OduAirBadFrames	1.3.6.1.4.1.4458.1000.1.5.9.3	Counter	RO	Total number of received radio frames with CRC error. The value is relevant only for point to point systems .
winlink1000OduAirCurrentRate	1.3.6.1.4.1.4458.1000.1.5.9.4	Integer	RO	Deprecated parameter. Actual rate of the air interface in Mbps. For Channel Bandwidth of 20 10 5 MHz divide the value by 1 2 4 respectively.
winlink1000OduAirCurrentRateIdx	1.3.6.1.4.1.4458.1000.1.5.9.5	Integer	RO	Index of current air rate.
winlink1000OduPerfMonCurrUAS	1.3.6.1.4.1.4458.1000.1.6.1.1.1	Gauge	RO	The current number of Unavailable Seconds starting from the present 15 minutes period.
winlink1000OduPerfMonCurrES	1.3.6.1.4.1.4458.1000.1.6.1.1.2	Gauge	RO	Current number of Errored Seconds starting from the present 15 minutes period.
winlink1000OduPerfMonCurrSES	1.3.6.1.4.1.4458.1000.1.6.1.1.3	Gauge	RO	Current number of Severely Errored Seconds starting from the present 15 minutes period.
winlink1000OduPerfMonCurrBBE	1.3.6.1.4.1.4458.1000.1.6.1.1.4	Gauge	RO	Current number of Background Block Errors starting from the present 15 minutes period.
winlink1000OduPerfMonCurrIntegrity	1.3.6.1.4.1.4458.1000.1.6.1.1.5	Integer	RO	Indicates the integrity of the entry.
winlink1000OduPerfMonCurrCompressed	1.3.6.1.4.1.4458.1000.1.6.1.1.6	OctetString	RO	Holds a compressed string of all data per interface. Compressed Air Interface Structure (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) MinRSL (1) MaxRSL (1) RSLThresh1Exceeded (4) RSLThresh2Exceeded (4) MinTSL (1) MaxTSL (1) TSLThresh1Exceed (4) BBERThresh1Exceed (4) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) Compressed Ethernet ODU interface (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) ActiveSeconds (4)
winlink1000OduPerfMonTdmCurrActiveSeconds	1.3.6.1.4.1.4458.1000.1.6.10.1.1	Gauge	RO	Parameter indicating whether the TDM service was active. Under TDM backup link the parameter indicates whether the backup link was active.
winlink1000OduPerfMonTxThresh1	1.3.6.1.4.1.4458.1000.1.6.20	Integer	RW	When the Transmit power exceeds this threshold a performance monitoring TSL1 counter is incremented.
winlink1000OduPerfMonRxThresh1	1.3.6.1.4.1.4458.1000.1.6.21	Integer	RW	When the RX power exceeds this threshold a performance monitoring RSL1 counter is incremented.
winlink1000OduPerfMonRxThresh2	1.3.6.1.4.1.4458.1000.1.6.22	Integer	RW	When the RX power exceeds this threshold a performance monitoring RSL2 counter is incremented.
winlink1000OduPerfMonBBERThresh1	1.3.6.1.4.1.4458.1000.1.6.23	Integer	RW	When the BBER exceeds this threshold a performance monitoring BBER counter is incremented. The units are 1/10 of a percent.
winlink1000OduPerfMonEthCapacityThreshKbps	1.3.6.1.4.1.4458.1000.1.6.24	Integer	RW	When the current throughput is below this threshold the corresponding counter is incremented
winlink1000OduPerfMonHighTrafficThreshKbps	1.3.6.1.4.1.4458.1000.1.6.25	Integer	RW	When the current traffic is above this threshold then corresponding counter is incremented.
winlink1000OduPerfMonAirCurrMinRSL	1.3.6.1.4.1.4458.1000.1.6.4.1.1	Integer	RO	Current Min Received Level Reference starting from the present 15 minutes period.
winlink1000OduPerfMonAirCurrMaxRSL	1.3.6.1.4.1.4458.1000.1.6.4.1.2	Integer	RO	Current Max Received Level Reference starting from the present 15 minutes period.

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Name	OID	Type	Access	Description
winlink1000OduPerfMonAirCurrRSLThresh1Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.3	Gauge	RO	Number of seconds Receive Signal Level exceeded the RSL1 threshold in the last 15 minutes.
winlink1000OduPerfMonAirCurrRSLThresh2Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.4	Gauge	RO	Number of seconds Receive Signal Level exceeded the RSL2 threshold in the last 15 minutes.
winlink1000OduPerfMonAirCurrMinTSL	1.3.6.1.4.1.4458.1000.1.6.4.1.5	Integer	RO	Current Min Transmit Signal Level starting from the present 15 minutes period.
winlink1000OduPerfMonAirCurrMaxTSL	1.3.6.1.4.1.4458.1000.1.6.4.1.6	Integer	RO	Current Max Transmit Signal Level starting from the present 15 minutes period.
winlink1000OduPerfMonAirCurrTSLThresh1Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.7	Gauge	RO	Number of seconds Transmit Signal Level exceeded the TSL1 threshold in the last 15 minutes.
winlink1000OduPerfMonAirCurrBBERThresh1Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.8	Gauge	RO	Number of seconds Background Block Error Ratio exceeded the BBER1 threshold in the last 15 minutes.
winlink1000OduPerfMonEthCurrRxMBytes	1.3.6.1.4.1.4458.1000.1.6.7.1.1	Gauge	RO	Current RX Mega Bytes starting from the present 15 minutes period.
winlink1000OduPerfMonEthCurrTxMBytes	1.3.6.1.4.1.4458.1000.1.6.7.1.2	Gauge	RO	Current Transmit Mega Bytes starting from the present 15 minutes period.
winlink1000OduPerfMonEthCurrEthCapacityThresholdUnder	1.3.6.1.4.1.4458.1000.1.6.7.1.3	Gauge	RO	The number of times throughput was below threshold in the present 15 minutes period. Relevant for point to point systems.
winlink1000OduPerfMonEthCurrHighTrafficThresholdExceeded	1.3.6.1.4.1.4458.1000.1.6.7.1.4	Gauge	RO	The number of times actual traffic was above threshold in the present 15 minutes period.
winlink1000OduPerfMonEthCurrActiveSeconds	1.3.6.1.4.1.4458.1000.1.6.7.1.5	Gauge	RO	The number of seconds in which RPL Ethernet swservice was not blocked in the present 15 minutes period.
winlink1000OduAgnGenAddTrapExt	1.3.6.1.4.1.4458.1000.1.7.1.1	Integer	RW	If 'yes' is chosen the ifIndex Unit Severity Time_T and Alarm Id from the winlink1000OduAgnCurrAlarmTable will be bind to the end of each private trap.
winlink1000OduAgnGenSetMode	1.3.6.1.4.1.4458.1000.1.7.1.2	Integer	RW	This parameter is reserved to the element manager provided with the product.
winlink1000OduAgnNTPCfgTimeServerIP	1.3.6.1.4.1.4458.1000.1.7.2.1	IPAddress	RW	IP address of the server from which the current time is loaded.
winlink1000OduAgnNTPCfgTimeOffsetFromUTC	1.3.6.1.4.1.4458.1000.1.7.2.2	Integer	RW	Offset from Coordinated Universal Time (minutes). Possible values: -1440..1440.
winlink1000OduAgnRealTimeAndDate	1.3.6.1.4.1.4458.1000.1.7.2.3	OctetString	RW	This parameter specifies the real time and date Format 'YYYY-MM-DD HH:MM:SS' (Hexadecimal). A date-time specification: field octets contents range ----- 1 1-2 year 0..65536 2 3 month 1..12 4 day 1..31 5 hour 0..23 5 6 minutes 0..59 7 seconds 0..60 (use 60 for leap-second) 7 8 deci-seconds 0..9 For example Tuesday May 26 1992 at 1:30:15 PM EDT would be displayed as: 07 c8 05 1a 0d 1e 0f 00 ( 1992 -5 -26 13:30:15 )
winlink1000OduAdmNTPCfgTimeServerIPv6	1.3.6.1.4.1.4458.1000.1.7.2.4	DisplayString	RW	IPv6 address of the server from which the current time is loaded.
winlink1000OduAgnCurrAlarmLastChange	1.3.6.1.4.1.4458.1000.1.7.3.1	Integer	RO	This counter is initialized to 0 after a device reset and is incremented upon each change in the winlink1000OduAgnCurrAlarmTable (either an addition or removal of an entry).
winlink1000OduAgnLastEventsNumber	1.3.6.1.4.1.4458.1000.1.7.4.1	Integer	RO	This counter indicates the size of the winlink1000OduAgnLastEventsTable
winlink1000OduAgnLastEventsIndex	1.3.6.1.4.1.4458.1000.1.7.4.2.1.1	Integer	RO	The index of the table



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Name	OID	Type	Access	Description
winlink1000OduAgnLastEventsSeverity	1.3.6.1.4.1.4458.1000.1.7.4.2.1.2	Integer	RO	Current Trap severity.
winlink1000OduAgnLastEventsIfIndex	1.3.6.1.4.1.4458.1000.1.7.4.2.1.3	Integer	RO	Interface Index where the event occurred. Traps that are not associated with a specific interface will have the following value: 65535.
winlink1000OduAgnLastEventsTimeT	1.3.6.1.4.1.4458.1000.1.7.4.2.1.4	Integer	RO	Timestamp of this trap. This number is in seconds from Midnight January 1st 1970.
winlink1000OduAgnLastEventsText	1.3.6.1.4.1.4458.1000.1.7.4.2.1.5	DisplayString	RO	Trap display text (same as the text in the sent trap).
winlink1000OduAgnUsersIndex	1.3.6.1.4.1.4458.1000.1.7.5.1.1	Integer	RO	SNMP users table index.
winlink1000OduAgnUsersUserName	1.3.6.1.4.1.4458.1000.1.7.5.1.2	DisplayString	RW	SNMP users user names.
winlink1000OduAgnUsersPassword	1.3.6.1.4.1.4458.1000.1.7.5.1.3	DisplayString	RW	SNMP users passwords.
winlink1000OduAgnUsersProfile	1.3.6.1.4.1.4458.1000.1.7.5.1.4	Integer	RW	SNMP users profile (1=Disabled 2=ReadOnly 3=ReadWrite).
winlink1000OduAgnUsersLastAccessTime	1.3.6.1.4.1.4458.1000.1.7.5.1.5	Integer	RO	SNMP users last access time.
winlink1000GeneralTrapDescription	1.3.6.1.4.1.4458.1000.100.1	DisplayString	RO	Trap's Description. Used for Trap parameters.
winlink1000GeneralTrapSeverity	1.3.6.1.4.1.4458.1000.100.2	Integer	RO	Trap's Severity. Used for Trap parameters.
winlink1000GeneralCookie	1.3.6.1.4.1.4458.1000.100.3	DisplayString	RW	Reserved for the Manager application provided with the product used for saving user preferences affecting ODU operation.
winlink1000GeneralEchangesCounter	1.3.6.1.4.1.4458.1000.100.4	Integer	RO	This counter is initialized to 0 after a device reset and is incremented upon each element constant write operation via SNMP or Telnet.
winlink1000GeneralTelnetSupport	1.3.6.1.4.1.4458.1000.100.5	Integer	RW	Enable/Disable Telnet protocol.
winlink1000GeneralWebSupport	1.3.6.1.4.1.4458.1000.100.6	Integer	RW	Enable/Disable Web Interface protocol. Mandatory Disabled - No option to enable the feature. Mandatory Enabled - No option to disable the feature.
winlink1000GeneralSNMPSupport	1.3.6.1.4.1.4458.1000.100.7	Integer	RW	Enable/Disable SNMP protocols
winlink1000GeneralSSHSupport	1.3.6.1.4.1.4458.1000.100.8	Integer	RW	Enable/Disable SSH protocols
winlink1000HbsAirState	1.3.6.1.4.1.4458.1000.3.1.1	Integer	RO	Holds the state of the HBS.
winlink1000HbsAirGeobeamwidth	1.3.6.1.4.1.4458.1000.3.1.10	Integer	RW	Geographic sector beamwidth in degrees * 10.
winlink1000HbsAirMaxDistanceMetersMobility	1.3.6.1.4.1.4458.1000.3.1.11	Integer	RW	Maximum distance in meters. Used by Mobility links only.
winlink1000HbsAirComboSwitchSectorFreqBandIdStr	1.3.6.1.4.1.4458.1000.3.1.12	DisplayString	RW	Switch Frequency band for the whole sector overriding some of the Combo parameters.
winlink1000HbsAirTimeSlotAllocationBitmap	1.3.6.1.4.1.4458.1000.3.1.13	DisplayString	RW	Time Slots Allocation Bitmap for the entire sector (Hex Value).
winlink1000HbsAirAvailableTimeSlotsUp	1.3.6.1.4.1.4458.1000.3.1.14	Integer	RO	This parameter holds the number of available UL time slots (not in use) in the air interface.
winlink1000HbsAirDownUtilMill	1.3.6.1.4.1.4458.1000.3.1.15	Integer	RO	Sector Air Interface utilization in the Downlink direction (thousandths). Average time percentage out of the entire BTS DL capability that was used for transmitting data to all the SUs.

Table 4-2: Private MIB Parameters - HBS (Sheet 15 of 38)

Name	OID	Type	Access	Description
winlink1000HbsAirUpUtilMill	1.3.6.1.4.1.4458.1000.3.1.16	Integer	RO	Sector Air Interface utilization in the Uplink direction (thousandths). The average number of timeslots that were used in the UL (by all the links) out of the entire number of timeslots.
winlink1000HbsAirDownTrafficKbps	1.3.6.1.4.1.4458.1000.3.1.17	Integer	RO	Average data throughput (expressed in Kbps) transmitted in the DL towards all the SUs during the last second.
winlink1000HbsAirUpTrafficKbps	1.3.6.1.4.1.4458.1000.3.1.18	Integer	RO	Average data throughput (expressed in Kbps) received in the UL from all the SUs during the last second.
winlink1000HbsAirCompressedMonSec	1.3.6.1.4.1.4458.1000.3.1.19	DisplayString	RO	One string that holds the 4 Utilization per Sector values: DownUtil (2 bytes) UpUtil (2 bytes) DownTraffic (4 bytes) UpTraffic (4 bytes).
winlink1000HbsAirOpMode	1.3.6.1.4.1.4458.1000.3.1.2	Integer	RW	Holds the operation mode of the HBS.
winlink1000HbsAirDelayVsTputOpt	1.3.6.1.4.1.4458.1000.3.1.20	Integer	RW	Delay vs. Throughput optimization type: 1 = Delay sensitivity 2 = Throughput optimized
winlink1000HbsAirUCBPMinCS	1.3.6.1.4.1.4458.1000.3.1.21.1	Integer	RW	Minimal contention slot length used for UCBP algorithm (in ms.) between 5-20ms.
winlink1000HbsAirUCBPSharingPercentage	1.3.6.1.4.1.4458.1000.3.1.21.2	Integer	RW	Sharing percentage used by UCBP algorithm (15-75)
winlink1000HbsAirSingleHsuMode	1.3.6.1.4.1.4458.1000.3.1.22	Integer	RW	Single HSU mode: 1 = Not Applicable 2 = Single HSU 3 = Multiple HSUs
winlink1000HbsAirMobilityAzTrack	1.3.6.1.4.1.4458.1000.3.1.23	Integer	RO	Azimuth tracking for mobility status: 1 = Not applicable 2 = Active 3 = Impossible
winlink1000HbsAirSyncEPerformance	1.3.6.1.4.1.4458.1000.3.1.24	Integer	RO	SyncE performance when HBS is not reference clock
winlink1000HbsAirAtpcEnable	1.3.6.1.4.1.4458.1000.3.1.25	Integer	RW	ATPC mode (off static or dynamic) status
winlink1000HbsAirAtpcTargetMCS	1.3.6.1.4.1.4458.1000.3.1.26	Integer	RW	targetRate for ATPC operation (100-309)
winlink1000HbsAirAtpcMaxAllowedRate	1.3.6.1.4.1.4458.1000.3.1.27	Integer	RO	Max allowed rate (will be 207 for N products and 209 for AC products)
winlink1000HbsAirAtpcTargetRSSPerRateIndex	1.3.6.1.4.1.4458.1000.3.1.28.1.1	Integer	RO	Atpc Target Rss Per Rate Index.
winlink1000HbsAirAtpcTargetRSSPerRate	1.3.6.1.4.1.4458.1000.3.1.28.1.2	Integer	RO	Atpc Target Rss Per Rate value.
winlink1000HbsAirAvailTimeSlots	1.3.6.1.4.1.4458.1000.3.1.3	Integer	RO	This parameter holds the number of available time slots (not in use) in the air interface.
winlink1000HbsAirSectorCbwSupportedStr	1.3.6.1.4.1.4458.1000.3.1.4	DisplayString	RO	Represents the channel bandwidth which is supported by the HBS and all connected HSUs.
winlink1000HbsAirCompressedMon	1.3.6.1.4.1.4458.1000.3.1.5	OctetString	RO	Holds HBS monitor data in compressed format: HBS Traffic Monitor In Bytes(4) Out Bytes(4) In Frames(4) Out Frames(4) HBS State (1) HBS Freq (4) Number of Links (2) EC Change Counter (4) Current Ratio (2) Total Air Frames (4) HBS Rx Rate in Kbps (4) HBS Tx Rate in Kbps (4) HBS Rx Rate in Fps (4) HBS Tx Rate in Fps (4) HBS Set Mode (1) HBS LAN 1 Rx Rate in Kbps (4) HBS LAN 1 Tx Rate in Kbps (4) HBS LAN 1 Rx Rate in Fps (4) HBS LAN 1 Tx Rate in Fps (4) HBS LAN 2 Rx Rate in Kbps (4) HBS LAN 2 Tx Rate in Kbps (4) HBS LAN 2 Rx Rate in Fps (4) HBS LAN 2 Tx Rate in Fps (4) SyncE Performance (1).
winlink1000HbsAirConfChanges	1.3.6.1.4.1.4458.1000.3.1.6.1	OctetString	RO	16 characters that represent 16 HSUs. Each time a configuration is been changed increment the relevant character.
winlink1000HbsAirConfIndex	1.3.6.1.4.1.4458.1000.3.1.6.2.1.1	Integer	RO	HSUs configuration table index.
winlink1000HbsAirConfHsuLevel	1.3.6.1.4.1.4458.1000.3.1.6.2.1.10	Integer	RW	HSU level (1 .. 4)

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Name	OID	Type	Access	Description
winlink1000HbsAirConfDesiredRateIndex	1.3.6.1.4.1.4458.1000.3.1.6.2.1.11	Integer	RW	The rate index of both sides of the link to this HSU.
winlink1000HbsAirConfMacAddress	1.3.6.1.4.1.4458.1000.3.1.6.2.1.12	DisplayString	RO	HSU MAC Address.
winlink1000HbsAirConfNumOfTsUp	1.3.6.1.4.1.4458.1000.3.1.6.2.1.13	Integer	RW	Number of UL time slot which are allocated to specific HSU.
winlink1000HbsAirConfLanPortsConnection	1.3.6.1.4.1.4458.1000.3.1.6.2.1.14	Integer	RW	Indicates if the connection between LAN 1 and LAN 2 is enabled. 1- Enabled 2- Disabled.
winlink1000HbsAirConfServiceCategory	1.3.6.1.4.1.4458.1000.3.1.6.2.1.15	Integer	RO	Indicates Service Category received from Radius server values can be from 1 to 8 0 - undefined
winlink1000HbsAirConfBeaconRssSyncLossThreshold	1.3.6.1.4.1.4458.1000.3.1.6.2.1.17	Integer	RW	RSS Threshold For Syncloss In Mobile Units
winlink1000HbsAirConfUpMir	1.3.6.1.4.1.4458.1000.3.1.6.2.1.2	Integer	RW	Uplink MIR towards specific HSU in units of kbps.
winlink1000HbsAirConfDownMir	1.3.6.1.4.1.4458.1000.3.1.6.2.1.3	Integer	RW	Downlink MIR towards specific HSU in units of kbps.
winlink1000HbsAirConfHsuName	1.3.6.1.4.1.4458.1000.3.1.6.2.1.4	DisplayString	RW	HSU name.
winlink1000HbsAirConfHsuLocation	1.3.6.1.4.1.4458.1000.3.1.6.2.1.5	DisplayString	RW	HSU location.
winlink1000HbsAirConfDualAntTxMode	1.3.6.1.4.1.4458.1000.3.1.6.2.1.6	Integer	RW	Transmission type when using Dual Antenna on both link's sides. spatial Multiplexing Diversity (using a single spatial stream) and Auto Selection (OMS control).
winlink1000HbsAirConfNumOfTs	1.3.6.1.4.1.4458.1000.3.1.6.2.1.7	Integer	RW	Number of time slot which are allocated to specific HSU.
winlink1000HbsAirConfGeoLocation	1.3.6.1.4.1.4458.1000.3.1.6.2.1.8	DisplayString	RW	Geographic device location in format: latitude longitude.
winlink1000HbsAirConfHsuType	1.3.6.1.4.1.4458.1000.3.1.6.2.1.9	Integer	RW	HSU type (1 = Fixed 2 = Stationary 3 = Mobile 4 = Transport)
winlink1000HbsAirConfBeaconRssSyncLossInterval	1.3.6.1.4.1.4458.1000.3.1.6.3	Integer	RW	Interval over which the RSS value is below the threshold.
winlink1000HbsAirLinkNumOfLinks	1.3.6.1.4.1.4458.1000.3.1.7.1	Integer	RO	Number of links in the links table.
winlink1000HbsAirLinkIndex	1.3.6.1.4.1.4458.1000.3.1.7.2.1.1	Integer	RO	HSUs configuration table index.
winlink1000HbsAirLinkHbsRssBal	1.3.6.1.4.1.4458.1000.3.1.7.2.1.10	Integer	RO	Holds the RSS Balance of specific link (HBS side). -2 : Radio 2 RSS is much stronger than Radio 1 RSS. -1 : Radio 2 RSS is stronger than Radio 1 RSS. -0 : Radio 2 RSS is equal to Radio 1 RSS. 1 : Radio 1 RSS is stronger than Radio 2 RSS. 2 : Radio 1 RSS is much stronger than Radio 2 RSS.
winlink1000HbsAirLinkHsuRss	1.3.6.1.4.1.4458.1000.3.1.7.2.1.11	Integer	RO	Holds the RSS of specific link (HSU side).
winlink1000HbsAirLinkHsuRssBal	1.3.6.1.4.1.4458.1000.3.1.7.2.1.12	Integer	RO	Holds the RSS Balance of specific link (HSU side). -2 : Radio 2 RSS is much stronger than Radio 1 RSS. -1 : Radio 2 RSS is stronger than Radio 1 RSS. -0 : Radio 2 RSS is equal to Radio 1 RSS. 1 : Radio 1 RSS is stronger than Radio 2 RSS. 2 : Radio 1 RSS is much stronger than Radio 2 RSS.
winlink1000HbsAirLinkHsuSerial	1.3.6.1.4.1.4458.1000.3.1.7.2.1.13	DisplayString	RO	Holds the serial number for specific HSU.
winlink1000HbsAirLinkTxOperMode	1.3.6.1.4.1.4458.1000.3.1.7.2.1.14	Integer	RO	Holds the TX operation mode.
winlink1000HbsAirHsuInBytes	1.3.6.1.4.1.4458.1000.3.1.7.2.1.15	Integer	RO	Number of frames received in the HSU Lan port.

Table 4-2: Private MIB Parameters - HBS (Sheet 17 of 38)

Name	OID	Type	Access	Description
winlink1000HbsAirHsuOutputBytes	1.3.6.1.4.1.4458.1000.3.1.7.2.1.16	Integer	RO	Number of frames transmitted from the HSU Lan port.
winlink1000HbsAirHsuInFrames	1.3.6.1.4.1.4458.1000.3.1.7.2.1.17	Integer	RO	Number of bytes received in the HSU Lan port.
winlink1000HbsAirHsuOutputFrames	1.3.6.1.4.1.4458.1000.3.1.7.2.1.18	Integer	RO	Number of bytes transmitted from the HSU Lan port.
winlink1000HbsAirHsuMacAddress	1.3.6.1.4.1.4458.1000.3.1.7.2.1.19	DisplayString	RO	HSU MAC Address.
winlink1000HbsAirLinkHsuld	1.3.6.1.4.1.4458.1000.3.1.7.2.1.2	Integer	RO	HSU ID of specific link (if registered). Unregistered links have -1.
winlink1000HbsAirMaxThroughputDown	1.3.6.1.4.1.4458.1000.3.1.7.2.1.20	Integer	RO	Max Throughput Downlink.
winlink1000HbsAirMaxThroughputUp	1.3.6.1.4.1.4458.1000.3.1.7.2.1.21	Integer	RO	Max Throughput Uplink.
winlink1000HbsAirLinkCompressedMon	1.3.6.1.4.1.4458.1000.3.1.7.2.1.22	OctetString	RO	Holds all the link information in compressed binary (Bytes/octets). Fields included (size in bytes): Link State(1) Link Working Mode(1) Session Id(4) HBS Est. Tput(4) HSU Est. Tput(4) HBS Rss(1) HBS Rss Balance(1) HSU Rss(1) HSU Rss Balance(1) Tx Operation Mode(1) HSU In Bytes(4) HSU Out Bytes(4) HSU In Frames(4) HSU Out Frames(4) HSU ID (1 bytes) HSU Rx Rate In Kbps (4) HSU Tx Rate In Kbps (4) HSU Rx Rate In Fps (4) HSU Tx Rate In Fps (4) Peak throughput in the DL direction (4) Peak throughput in the UL direction (4) Number of local changes at HSU(1) Alignment Status(1) HBS Chain 1 Rss(1) HBS Chain 2 Rss(1) HBS Chain 3 Rss(1) HSU Chain 1 Rss(1) HSU Chain 2 Rss(1) HSU Chain 3 Rss(1) HSU Current Rate Index (2 bytes) HSU Current Rate CBW (1 bytes) HSU Current Rate GI (1 bytes) HBS Current Rate Index (2 bytes) HBS Current Rate CBW (1 bytes) HBS Current Rate GI (1 bytes) Bsa Azimuth(2) HSU LAN 1 Rx Rate In Kbps (4) HSU LAN 1 Tx Rate In Kbps (4) HSU LAN 1 Rx Rate In Fps (4) HSU LAN 1 Tx Rate In Fps (4) HSU LAN 2 Rx Rate In Kbps (4) HSU LAN 2 Tx Rate In Kbps (4) HSU LAN 2 Rx Rate In Fps (4) HSU LAN 2 Tx Rate In Fps (4) 1588TC Performance(1) SyncE Performance(1) ATPC status (1)
winlink1000HbsAirLinkCompressedStatic	1.3.6.1.4.1.4458.1000.3.1.7.2.1.23	DisplayString	RO	Holds all the configuration data of this link in compressed format. Helps the NMS to get info regarding new Unregistered links. Fields Included: SessionID (4 bytes) HSU IP address (4 bytes) HSU Name (32 bytes) HSU Location (32 bytes) HSU Serial number (16 bytes) HSU MAC Address (12 bytes) Air Link Range Max Throughput Down (4 bytes) Max Throughput Up. (4 bytes) Capacity Limit (4 bytes) HSU Antenna type (1 byte) Aggregate Capacity (4 bytes) 1588TC supported (1 byte) SyncE supported (1 byte)
winlink1000HbsAirCpeCapacityLimit	1.3.6.1.4.1.4458.1000.3.1.7.2.1.24	Integer	RO	Capacity Limit in Kilo bit per second.
winlink1000HbsAirLinkAntennaType	1.3.6.1.4.1.4458.1000.3.1.7.2.1.25	Integer	RO	HSU External Antenna Type: Monopolar or Bipolar.
winlink1000HbsAirHsuRxRateInKbps	1.3.6.1.4.1.4458.1000.3.1.7.2.1.26	Integer	RO	HSU Rx Rate in Kbps.
winlink1000HbsAirHsuTxRateInKbps	1.3.6.1.4.1.4458.1000.3.1.7.2.1.27	Integer	RO	HSU Tx Rate in Kbps.
winlink1000HbsAirHsuRxRateInFps	1.3.6.1.4.1.4458.1000.3.1.7.2.1.28	Integer	RO	HSU Rx Rate in Fps.
winlink1000HbsAirHsuTxRateInFps	1.3.6.1.4.1.4458.1000.3.1.7.2.1.29	Integer	RO	HSU Tx Rate in Fps.
winlink1000HbsAirLinkState	1.3.6.1.4.1.4458.1000.3.1.7.2.1.3	Integer	RO	Holds the state of specific link.

Table 4-2: Private MIB Parameters - HBS (Sheet 18 of 38)

Name	OID	Type	Access	Description
winlink1000HbsAirLinkPeakTputDown	1.3.6.1.4.1.4458.1000.3.1.7.2.1.30	Integer	RO	Peak throughput in the DL direction (kbps).
winlink1000HbsAirLinkPeakTputUp	1.3.6.1.4.1.4458.1000.3.1.7.2.1.31	Integer	RO	Peak throughput in the UL direction (kbps).
winlink1000HbsAirLinkUtilDownSecRelMill	1.3.6.1.4.1.4458.1000.3.1.7.2.1.32	Integer	RO	The average time percentage (in thousandths) out of the BTS DL capability that was used for transmitting data to the SU.
winlink1000HbsAirLinkUtilUpSecRelMill	1.3.6.1.4.1.4458.1000.3.1.7.2.1.33	Integer	RO	The average time percentage (in thousandths) out of the BTS UL capability that was used for receiving data from the SU.
winlink1000HbsAirLinkUtilDownAllocRelMill	1.3.6.1.4.1.4458.1000.3.1.7.2.1.34	Integer	RO	The time percentage (in thousandths) relative to the SU DL allocation that was used for transmitting data to the SU.
winlink1000HbsAirLinkUtilUpAllocRelMill	1.3.6.1.4.1.4458.1000.3.1.7.2.1.35	Integer	RO	The time percentage (in thousandths) relative to the SU UL allocation that was used for receiving data from the SU.
winlink1000HbsAirLinkUtilDownTrafficKbps	1.3.6.1.4.1.4458.1000.3.1.7.2.1.36	Integer	RO	Average data throughput (Exported in Kbps) transmitted in the DL towards the SU during the last second.
winlink1000HbsAirLinkUtilUpTrafficKbps	1.3.6.1.4.1.4458.1000.3.1.7.2.1.37	Integer	RO	Average data throughput (Exported in Kbps) received in the UL from the SU during the last second.
winlink1000HbsAirLinkUtilCompressedMon	1.3.6.1.4.1.4458.1000.3.1.7.2.1.38	OctetString	RO	One string that holds the 6 Utilization per link values: DownSecRel (2 bytes) UpSecRel (2 bytes) DownAllocRel (4 bytes) UpAllocRel (4 bytes) DownTraffic (4 bytes) UpTraffic (4 bytes).
winlink1000HbsAirLinkBsaAzimuth	1.3.6.1.4.1.4458.1000.3.1.7.2.1.39	Integer	RO	Absolute (geographical) azimuth of the HSU (looking from HBS site).
winlink1000HbsAirLinkWorkingMode	1.3.6.1.4.1.4458.1000.3.1.7.2.1.4	Integer	RO	Indicates the sub-state within the version compatibility.
winlink1000HbsAirLink1588TCPerformance	1.3.6.1.4.1.4458.1000.3.1.7.2.1.40	Integer	RO	TC performance.
winlink1000HbsAirLinkSyncEPerformance	1.3.6.1.4.1.4458.1000.3.1.7.2.1.41	Integer	RO	SyncE performance.
winlink1000HbsAirLinkSessionId	1.3.6.1.4.1.4458.1000.3.1.7.2.1.5	Integer	RO	Holds the Session ID of the link.
winlink1000HbsAirLinkHbsEstTput	1.3.6.1.4.1.4458.1000.3.1.7.2.1.6	Integer	RO	Holds the Estimated throughput from the HBS to the HSU.
winlink1000HbsAirLinkHsuEstTput	1.3.6.1.4.1.4458.1000.3.1.7.2.1.7	Integer	RO	Holds the Estimated throughput from the HSU to the HBS.
winlink1000HbsAirLinkRange	1.3.6.1.4.1.4458.1000.3.1.7.2.1.8	Integer	RO	Holds the range of specific link.
winlink1000HbsAirLinkHbsRss	1.3.6.1.4.1.4458.1000.3.1.7.2.1.9	Integer	RO	Holds the RSS of specific link (HBS side).
winlink1000HbsAirComboSwitchSectorFreqBandId	1.3.6.1.4.1.4458.1000.3.1.8	Integer	RW	Switch Frequency band for the whole sector.
winlink1000HbsAirGeoAzimuth	1.3.6.1.4.1.4458.1000.3.1.9	Integer	RW	Geographic sector azimuth in degrees * 10.
winlink1000HbsBridgeAgingTime	1.3.6.1.4.1.4458.1000.3.2.1	Integer	RW	Timeout in seconds for aging.
winlink1000HbsBridgeMembershipIndex	1.3.6.1.4.1.4458.1000.3.2.3.1.1	Integer	RO	HBS bridge membership table index.
winlink1000HbsBridgeMembershipState	1.3.6.1.4.1.4458.1000.3.2.3.1.2	Gauge	RW	HBS bridge membership state bitmap. Each bit represents Blocked/Opened relation (membership) between two HSUs. Blocked=0 (bit) Opened=1 (bit). This object holds the relation to 32 HSUs.
winlink1000HbsBridgeMembershipState2nd	1.3.6.1.4.1.4458.1000.3.2.3.1.3	Gauge	RW	HBS bridge membership state bitmap. Each bit represents Blocked/Opened relation (membership) between HSU and LAN/Stack port of the HBS. Blocked=0 (bit) Opened=1 (bit). Only 2 bits are used.



Table 4-2: Private MIB Parameters - HBS (Sheet 19 of 38)

Name	OID	Type	Access	Description
winlink1000HbsBridgeFloodOverloadProtect	1.3.6.1.4.1.4458.1000.3.2.4	Integer	RW	Flood overload protection 1- Enabled 2- Disabled.
winlink1000HbsServiceCommandStr	1.3.6.1.4.1.4458.1000.3.3.1	DisplayString	RW	Ability to perform special command in the HBS. Format (string): Operation Index Session Param1 Param2 ....   ParamN The index and SessionID can be uniting to one parameter. On registered HSU it is HSU-ID and on Unregistered it is Session-ID.
winlink1000HbsServiceVlanIndex	1.3.6.1.4.1.4458.1000.3.3.2.1.1.1	Integer	RO	HBS service Vlan table index.
winlink1000OduServiceVlanTblEgressFilter4	1.3.6.1.4.1.4458.1000.3.3.2.1.1.10	Integer	RW	VLAN Filter4 VID
winlink1000OduServiceVlanTblUntagFilteredBitmap	1.3.6.1.4.1.4458.1000.3.3.2.1.1.11	Integer	RW	Represents (in bitmap) if to Untag a frame after it is filtered (Egress direction) [4 bits represent 4 filters].
winlink1000OduServiceVlanTblProviderTPID	1.3.6.1.4.1.4458.1000.3.3.2.1.1.12	DisplayString	RW	Holds the Provider TPID that is used in all provider operations.
winlink1000OduServiceVlan2TblTag	1.3.6.1.4.1.4458.1000.3.3.2.1.1.13	Integer	RW	The VID 2 to be used when adding TAG or adding Provider
winlink1000OduServiceVlan2TblPri	1.3.6.1.4.1.4458.1000.3.3.2.1.1.14	Integer	RW	The Vlan 2 priority 0-7 to be used when adding TAG or adding Provider
winlink1000OduServiceVlan2TblMajorMode	1.3.6.1.4.1.4458.1000.3.3.2.1.1.15	Integer	RW	The Vlan 2 major mode
winlink1000OduServiceVlan2TblEgressMode	1.3.6.1.4.1.4458.1000.3.3.2.1.1.16	Integer	RW	The Vlan 2 mode in the Egress direction
winlink1000OduServiceVlan2TblIngressMode	1.3.6.1.4.1.4458.1000.3.3.2.1.1.17	Integer	RW	The Vlan 2 mode in the Ingress direction
winlink1000OduServiceVlan2TblEgressFilter1	1.3.6.1.4.1.4458.1000.3.3.2.1.1.18	Integer	RW	VLAN 2 Filter1 VID
winlink1000OduServiceVlan2TblEgressFilter2	1.3.6.1.4.1.4458.1000.3.3.2.1.1.19	Integer	RW	VLAN 2 Filter2 VID
winlink1000OduServiceVlanTblTag	1.3.6.1.4.1.4458.1000.3.3.2.1.1.2	Integer	RW	The VID to be used when adding TAG or adding Provider
winlink1000OduServiceVlan2TblEgressFilter3	1.3.6.1.4.1.4458.1000.3.3.2.1.1.20	Integer	RW	VLAN 2 Filter3 VID
winlink1000OduServiceVlan2TblEgressFilter4	1.3.6.1.4.1.4458.1000.3.3.2.1.1.21	Integer	RW	VLAN 2 Filter4 VID
winlink1000OduServiceVlan2TblUntagFilteredBitmap	1.3.6.1.4.1.4458.1000.3.3.2.1.1.22	Integer	RW	Represents (in bitmap) if to Untag a frame after it is filtered (Egress direction) [4 bits represent 4 filters].
winlink1000OduServiceVlan2TblProviderTPID	1.3.6.1.4.1.4458.1000.3.3.2.1.1.23	DisplayString	RW	Holds the Provider TPID that is used in all provider operations.
winlink1000OduServiceVlanTblPri	1.3.6.1.4.1.4458.1000.3.3.2.1.1.3	Integer	RW	The Vlan priority 0-7 to be used when adding TAG or adding Provider
winlink1000OduServiceVlanTblMajorMode	1.3.6.1.4.1.4458.1000.3.3.2.1.1.4	Integer	RW	The Vlan major mode
winlink1000OduServiceVlanTblEgressMode	1.3.6.1.4.1.4458.1000.3.3.2.1.1.5	Integer	RW	The Vlan mode in the Egress direction
winlink1000OduServiceVlanTblIngressMode	1.3.6.1.4.1.4458.1000.3.3.2.1.1.6	Integer	RW	The Vlan mode in the Ingress direction
winlink1000OduServiceVlanTblEgressFilter1	1.3.6.1.4.1.4458.1000.3.3.2.1.1.7	Integer	RW	VLAN Filter1 VID
winlink1000OduServiceVlanTblEgressFilter2	1.3.6.1.4.1.4458.1000.3.3.2.1.1.8	Integer	RW	VLAN Filter2 VID
winlink1000OduServiceVlanTblEgressFilter3	1.3.6.1.4.1.4458.1000.3.3.2.1.1.9	Integer	RW	VLAN Filter3 VID

Table 4-2: Private MIB Parameters - HBS (Sheet 20 of 38)

Name	OID	Type	Access	Description
winlink1000HbsServiceQoSMode	1.3.6.1.4.1.4458.1000.3.3.3.1	Integer	RW	Quality of Service mode.
winlink1000HbsServiceQoSvlanQGroupsStr	1.3.6.1.4.1.4458.1000.3.3.3.2	DisplayString	RW	Frame classification according to VLAN priority (all 4 groups separated by comma).
winlink1000HbsServiceQoSdiffservQGroupsStr	1.3.6.1.4.1.4458.1000.3.3.3.3	DisplayString	RW	Frame classification according to Diffserv (all 4 groups separated by comma).
winlink1000HbsServiceQoSMaxRtQuePct	1.3.6.1.4.1.4458.1000.3.3.3.4	Integer	RO	Maximal percent for RT and NRT queues.
winlink1000HbsServiceQoSIndex	1.3.6.1.4.1.4458.1000.3.3.3.5.1.1	Integer	RO	HBS service QoS table index.
winlink1000HbsServiceQoSDownStrict	1.3.6.1.4.1.4458.1000.3.3.3.5.1.10	DisplayString	RW	Strict QOS Boolean indication for each QOS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfAdminState	1.3.6.1.4.1.4458.1000.3.3.3.5.1.2	Integer	RW	QoS administrative state. The valid values are: enabled (1) disabled (2).
winlink1000HbsServiceQoSConfUpQueMir	1.3.6.1.4.1.4458.1000.3.3.3.5.1.3	DisplayString	RW	Private MIR for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfUpQueWeight	1.3.6.1.4.1.4458.1000.3.3.3.5.1.4	DisplayString	RW	Weight in percent for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfDownQueMir	1.3.6.1.4.1.4458.1000.3.3.3.5.1.5	DisplayString	RW	Private MIR for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfDownQueWeight	1.3.6.1.4.1.4458.1000.3.3.3.5.1.6	DisplayString	RW	Weight in percent for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSUpTtlMs	1.3.6.1.4.1.4458.1000.3.3.3.5.1.7	DisplayString	RW	TTL in mili second for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceQoSDownTtlMs	1.3.6.1.4.1.4458.1000.3.3.3.5.1.8	DisplayString	RW	TTL in mili second for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSUpStrict	1.3.6.1.4.1.4458.1000.3.3.3.5.1.9	DisplayString	RW	Strict QOS Boolean indication for each QOS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceMobilitySupported	1.3.6.1.4.1.4458.1000.3.3.4	Integer	RO	Mobility Support (1 = Not supported 2 = Supported 3 - Transport supported)
winlink1000HbsServiceMaxNumOfHSUs	1.3.6.1.4.1.4458.1000.3.3.5	Integer	RO	Holds the maximum number of registered HSUs in the HBS.
winlink1000HbsServiceSynchronization1588TCEenable	1.3.6.1.4.1.4458.1000.3.3.6.1	Integer	RW	Enable/Disable PTP TC support. Value Mandatory Disabled is unchangeable.
winlink1000HbsServiceSynchronizationSyncEenable	1.3.6.1.4.1.4458.1000.3.3.6.2	Integer	RW	Enable/Disable SyncE support. Value Mandatory Disabled is unchangeable.
winlink1000HbsServiceSynchronizationSyncESSMGeneration	1.3.6.1.4.1.4458.1000.3.3.6.3	Integer	RW	Enable/Disable SyncE SSM Generation.
winlink1000HbsServiceSynchronizationSyncESupportedReferenceClock	1.3.6.1.4.1.4458.1000.3.3.6.4	DisplayString	RO	List of valid Reference Clk HBS/HSU + Port ID.
winlink1000HbsServiceSynchronizationSyncEDesiredReferenceClock	1.3.6.1.4.1.4458.1000.3.3.6.5	DisplayString	RW	Desired Reference Clk HBS/HSU + Port ID.
winlink1000HbsServiceRadiusAuthorizationMode	1.3.6.1.4.1.4458.1000.3.3.7.1	Integer	RW	Enables/Disables Radius Authorization 1 - disable 2- enable
winlink1000HbsServiceRadiusUserName	1.3.6.1.4.1.4458.1000.3.3.7.2	DisplayString	RW	Radius client user Name
winlink1000HbsServiceRadiusPassword	1.3.6.1.4.1.4458.1000.3.3.7.3	DisplayString	RW	Radius client password



Table 4-2: Private MIB Parameters - HBS (Sheet 21 of 38)

Name	OID	Type	Access	Description
winlink1000HbsServiceRadiusServerIndex	1.3.6.1.4.1.4458.1000.3.3.7.4.1.1	Integer	RO	Radius Server table index.
winlink1000HbsServiceRadiusServerIpAddr	1.3.6.1.4.1.4458.1000.3.3.7.4.1.2	IPAddress	RW	Radius server IP
winlink1000HbsServiceRadiusServerPort	1.3.6.1.4.1.4458.1000.3.3.7.4.1.3	Integer	RW	Radius server Port
winlink1000HbsServiceRadiusServerSecret	1.3.6.1.4.1.4458.1000.3.3.7.4.1.4	DisplayString	RW	Radius server Secret
winlink1000HbsServiceRadiusServerConnectivity	1.3.6.1.4.1.4458.1000.3.3.7.4.1.5	Integer	RW	Radius server connectivity status
winlink1000HbsServiceRadiusServerNumberOfRetries	1.3.6.1.4.1.4458.1000.3.3.7.4.1.6	Integer	RW	Radius server number of retries
winlink1000HbsServiceRadiusServerTimeout	1.3.6.1.4.1.4458.1000.3.3.7.4.1.7	Integer	RW	Radius server timeout
winlink1000HbsServiceCategoryIndex	1.3.6.1.4.1.4458.1000.3.3.8.1.1	Integer	RW	Service Category Index
winlink1000HbsServiceCategoryQoSDownQueueWeight	1.3.6.1.4.1.4458.1000.3.3.8.1.10	DisplayString	RW	Weight in percent for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSUpTtlMs	1.3.6.1.4.1.4458.1000.3.3.8.1.11	DisplayString	RW	TTL in mili second for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSDownTtlMs	1.3.6.1.4.1.4458.1000.3.3.8.1.12	DisplayString	RW	TTL in mili second for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSUpStrict	1.3.6.1.4.1.4458.1000.3.3.8.1.13	DisplayString	RW	Strict QOS Boolean indication for each QOS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSDownStrict	1.3.6.1.4.1.4458.1000.3.3.8.1.14	DisplayString	RW	Strict QOS Boolean indication for each QOS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceCategoryName	1.3.6.1.4.1.4458.1000.3.3.8.1.2	DisplayString	RW	Service Category Name
winlink1000HbsServiceCategoryULResources	1.3.6.1.4.1.4458.1000.3.3.8.1.3	Integer	RW	Service Category Uplink Resources
winlink1000HbsServiceCategoryDLResources	1.3.6.1.4.1.4458.1000.3.3.8.1.4	Integer	RW	Service Category Downlink Resources
winlink1000HbsServiceCategoryULMir	1.3.6.1.4.1.4458.1000.3.3.8.1.5	Integer	RW	Service Category Uplink MIR
winlink1000HbsServiceCategoryDLMir	1.3.6.1.4.1.4458.1000.3.3.8.1.6	Integer	RW	Service Category Downlink MIR
winlink1000HbsServiceCategoryQoSUpQueueMir	1.3.6.1.4.1.4458.1000.3.3.8.1.7	DisplayString	RW	Private MIR for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSUpQueueWeight	1.3.6.1.4.1.4458.1000.3.3.8.1.8	DisplayString	RW	Weight in percent for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSDownQueueMir	1.3.6.1.4.1.4458.1000.3.3.8.1.9	DisplayString	RW	Private MIR for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsPerformanceMonitorTxThresh1	1.3.6.1.4.1.4458.1000.3.4.1.1.2	Integer	RW	HBS performance monitor transmit power threshold.
winlink1000HbsPerformanceMonitorRxThresh1	1.3.6.1.4.1.4458.1000.3.4.1.1.3	Integer	RW	HBS performance monitor receive power threshold 1.
winlink1000HbsPerformanceMonitorRxThresh2	1.3.6.1.4.1.4458.1000.3.4.1.1.4	Integer	RW	HBS performance monitor receive power threshold 2.
winlink1000HbsPerformanceMonitorBBERThresh1	1.3.6.1.4.1.4458.1000.3.4.1.1.5	Integer	RW	HBS performance monitor BBBER threshold.

Table 4-2: Private MIB Parameters - HBS (Sheet 22 of 38)

Name	OID	Type	Access	Description
winlink1000HbsPerfMonEstThroughputThreshKbps	1.3.6.1.4.1.4458.1000.3.4.1.1.6	Integer	RW	HBS performance monitor estimated throughput Threshold.
winlink1000HbsPerfMonHighTrafficThreshKbps	1.3.6.1.4.1.4458.1000.3.4.1.1.7	Integer	RW	HBS performance monitor high traffic threshold.
winlink1000HbsPerfMonAirGenCurrRxMBytes	1.3.6.1.4.1.4458.1000.3.4.2.1.1	Gauge	RO	Current RX Mega Bytes starting from the present 15 minutes period. (Represents the LAN traffic RX direction toward the HSU)
winlink1000HbsPerfMonAirGenCurrTxMBytes	1.3.6.1.4.1.4458.1000.3.4.2.1.2	Gauge	RO	Current Transmit Mega Bytes starting from the present 15 minutes period. (Represents the LAN traffic TX direction from the HSU)
winlink1000HbsPerfMonAirGenCurrEthCapacityThreshUnder	1.3.6.1.4.1.4458.1000.3.4.2.1.3	Gauge	RO	The number of times throughput was below threshold in the present 15 minutes period. Relevant for point to point systems.
winlink1000HbsPerfMonAirGenCurrHighTrafficThreshExceed	1.3.6.1.4.1.4458.1000.3.4.2.1.4	Gauge	RO	The number of times actual traffic was above threshold in the present 15 minutes period.
winlink1000HbsPerfMonAirGenCurrActiveSeconds	1.3.6.1.4.1.4458.1000.3.4.2.1.5	Gauge	RO	The number of seconds in which RPL Ethernet swservice was not blocked in the present 15 minutes period.
winlink1000HbsAdminInstallationConfirmationRequired	1.3.6.1.4.1.4458.1000.3.5.1	Integer	RW	Installation Confirmation required for Radius mode. 1- true 2- false
winlink1000OduAdmHostsTable			N/A	Trap destinations table. Each trap destination is defined by an IP address and a UDP port. Up to 10 addresses can be configured.
winlink1000OduAdmHostsEntry			N/A	Trap destinations table entry. INDEX { winlink1000OduAdmHostsIndex }
winlink1000OduSrvRingVlanIdTable			N/A	Ring VLAN IDs table.
winlink1000OduSrvRingVlanIdEntry			N/A	VLAN ID of the internal ring messages. Valid values are 1 to 4094. Initial value is 0 meaning VLAN unaware. INDEX { winlink1000OduSrvRingVlanIdIndex }
winlink1000OduSrvQoSConfTable			N/A	QoS configuration table.
winlink1000OduSrvQoSConfEntry			N/A	QoS configuration table. INDEX { winlink1000OduSrvQoSConfIndex }
winlink1000OduEthernetIfTable			N/A	ODU Ethernet Interface table.
winlink1000OduEthernetIfEntry			N/A	ODU Ethernet Interface table entry. INDEX { winlink1000OduEthernetIfIndex }
winlink1000OduBridgeBasePortTable			N/A	ODU Bridge Ports table.
winlink1000OduBridgeBasePortEntry			N/A	ODU Bridge Ports table entry. INDEX { winlink1000OduBridgeBasePortIndex }
winlink1000OduBridgeTpPortTable			N/A	ODU Transparent Bridge Ports table.
winlink1000OduBridgeTpPortEntry			N/A	ODU Transparent Bridge Ports table entry. INDEX { winlink1000OduBridgeTpPortIndex }
winlink1000OduAirChannelsTable			N/A	Table of channels used by automatic channels selection (ACS).
winlink1000OduAirChannelsEntry			N/A	ACS channels table entry. INDEX { winlink1000OduAirChannelsIndex }
winlink1000OduAirMaxTxPowerTable			N/A	Table of Maximum transmit power per air rate in dBm.

Table 4-2: Private MIB Parameters - HBS (Sheet 23 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirMaxTxPowerEntry			N/A	Maximum Transmit power table entry. INDEX { winlink1000OduAirMaxTxPowerIndex }
winlink1000OduAirChannelBWTable			N/A	Channel Bandwidths table.
winlink1000OduAirChannelBWEntry			N/A	Channel Bandwidth table entry. INDEX { winlink1000OduAirChannelBWIndex }
winlink1000OduAirRatesTable			N/A	Air Rate indexes table for current channel bandwidth.
winlink1000OduAirRatesEntry			N/A	Air Rate indexes table entry. INDEX { winlink1000OduAirRatesIndex }
winlink1000OduAirHssRfpTable			N/A	ODU Radio Frame Patterns (RFP) Table.
winlink1000OduAirHssRfpEntry			N/A	ODU RFP Table entry. INDEX { winlink1000OduAirHssRfpIndex }
winlink1000OduAirHssDiscoverTable			N/A	HSS Discover Table.
winlink1000OduAirHssDiscoverEntry			N/A	ODU Discover Table entry. INDEX { winlink1000OduAirHssDiscoverIndex }
winlink1000OduAirHssAssociatedCUTable			N/A	Associated Ethernet HSS Clients Table. Relevant for Ethernet HSS Masters only.
winlink1000OduAirHssAssociatedCUTableEntry			N/A	Associated Ethernet HSS Clients Table Entry. Relevant for Ethernet HSS Masters only. INDEX { winlink1000OduAirHssAssociatedCUIIndex }
winlink1000OduAirComboSubBandTable			N/A	ODU Multi-band Sub Bands Table.
winlink1000OduAirComboSubBandEntry			N/A	ODU Multi-band Sub Bands Table entry. INDEX { winlink1000OduAirComboSubBandIndex }
winlink1000OduAirSpectrumChannelTable			N/A	ODU Spectrum Analysis Channel Table.
winlink1000OduAirSpectrumChannelTableEntry			N/A	ODU Spectrum Analysis Channel Table entry. INDEX { winlink1000OduAirSpectrumChannelIndex }
winlink1000OduAirDfsLastDetectedTbl			N/A	Last detected radars table.
winlink1000OduAirDfsLastDetectedEntry			N/A	ODU Multi-band Sub Bands Table entry. INDEX { winlink1000OduAirDfsLastDetectedIndex }
winlink1000OduPerfMonCurrTable			N/A	This table defines/keeps the counters of the current 15 min interval.
winlink1000OduPerfMonCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonIntervalTable			N/A	This table defines/keeps the counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonIntervalIdx }
winlink1000OduPerfMonDayTable			N/A	This table defines/keeps the counters of the last month (in resolution of days).
winlink1000OduPerfMonDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonDayIdx }
winlink1000OduPerfMonAirCurrTable			N/A	This table defines/keeps the air counters of the current 15 min interval.
winlink1000OduPerfMonAirCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonAirIntervalTable			N/A	This table defines/keeps the air counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonAirIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonAirIntervalIdx }

Table 4-2: Private MIB Parameters - HBS (Sheet 24 of 38)

Name	OID	Type	Access	Description
winlink1000OduPerfMonAirDayTable			N/A	This table defines/keeps the air counters of the last month (in resolution of days).
winlink1000OduPerfMonAirDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonAirDayIdx }
winlink1000OduPerfMonEthCurrTable			N/A	This table defines/keeps the ethernet counters of the current 15 min interval.
winlink1000OduPerfMonEthCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonEthIntervalTable			N/A	This table defines/keeps the ethernet counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonEthIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonEthIntervalIdx }
winlink1000OduPerfMonEthDayTable			N/A	This table defines/keeps the ethernet counters of the last month (in resolution of days).
winlink1000OduPerfMonEthDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonEthDayIdx }
winlink1000OduPerfMonTdmCurrTable			N/A	This table defines/keeps the TDM counters of the current 15 min interval.
winlink1000OduPerfMonTdmCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonTdmIntervalTable			N/A	This table defines/keeps the TDM counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonTdmIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonTdmIntervalIdx }
winlink1000OduPerfMonTdmDayTable			N/A	This table defines/keeps the TDM counters of the last month (in resolution of days).
winlink1000OduPerfMonTdmDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonTdmDayIdx }
winlink1000OduAgnCurrAlarmTable			N/A	This table includes the currently active alarms. When a RAISED trap is sent an alarm entry is added to the table. When a CLEAR trap is sent the entry is removed.
winlink1000OduAgnCurrAlarmEntry			N/A	Entry containing the details of a currently RAISED trap. INDEX { winlink1000OduAgnCurrAlarmCounter }
winlink1000OduAgnLastEventsTable			N/A	This table includes the last events. When a trap is sent an event entry is added to the table.
winlink1000OduAgnLastEventsEntry			N/A	Entry containing the details of last traps. INDEX { winlink1000OduAgnLastEventsIndex }
winlink1000OduAgnUsersTable			N/A	SNMP users table. Each user is defined by name password and profile.
winlink1000OduAgnUsersEntry			N/A	SNMP users table entry. INDEX { winlink1000OduAgnUsersIndex }
winlink1000OduAdmExternAlarmInTable			N/A	This is the External Alarm Inputs table.
winlink1000OduAdmExternAlarmInEntry			N/A	Entry containing the elements of a single External Alarm Input. INDEX { winlink1000OduAdmExternAlarmInIndex }
winlink1000IduSrvPossibleServicesTable			N/A	IDU Possible Services table.
winlink1000IduSrvPossibleServicesEntry			N/A	IDU Services table entry. INDEX { winlink1000IduSrvPossibleServicesIndex }
winlink1000IduSrvAvailServicesTable			N/A	ODU Possible TDM Services table.
winlink1000IduSrvAvailServicesEntry			N/A	ODU TDM Services table entry. INDEX { winlink1000IduSrvAvailServicesIndex }
winlink1000IduEthernetIfTable			N/A	IDU Ethernet Interface table.

Table 4-2: Private MIB Parameters - HBS (Sheet 25 of 38)

Name	OID	Type	Access	Description
winlink1000IduEthernetIfEntry			N/A	IDU Ethernet Interface table entry. INDEX { winlink1000IduEthernetIfIndex }
winlink1000IduTdmConfigTable			N/A	IDU TDM Links Configuration table.
winlink1000IduTdmConfigEntry			N/A	IDU TDM Links Configuration table entry. INDEX { winlink1000IduTdmConfigIndex }
winlink1000IduTdmCurrentTable			N/A	IDU TDM Links Statistics table.
winlink1000IduTdmCurrentEntry			N/A	IDU TDM Links Statistics table entry. INDEX { winlink1000IduTdmCurrentIndex }
winlink1000IduTdmBackupTable			N/A	IDU TDM Links Statistics table.
winlink1000IduTdmBackupEntry			N/A	IDU TDM Links Statistics table entry. INDEX { winlink1000IduTdmBackupIndex }
winlink1000HbsAirConfTable			N/A	Holds the table for all registered HSUs in the sector (16 entries).
winlink1000HbsAirConfEntry			N/A	HSUs configuration table entry. INDEX { winlink1000HbsAirConfIndex }
winlink1000HbsAirLinkTable			N/A	Holds the table for all links in the sector.
winlink1000HbsAirLinkEntry			N/A	Link table entry. INDEX { winlink1000HbsAirLinkIndex }
winlink1000HbsAirAtpcTargetRSSPerRateTable			N/A	Table of Atpc Target Rss Per Rate.
winlink1000HbsAirAtpcMaxAllowedRateEntry			N/A	Atpc Target Rss Per Rate table entry. INDEX { winlink1000HbsAirAtpcTargetRSSPerRateIndex }
winlink1000HbsBridgeVlanTable			N/A	Holds the bridge Vlan operations towards all the registered HSUs.
winlink1000HbsBridgeVlanEntry			N/A	HBS bridge Vlan table entry. INDEX { winlink1000HbsBridgeVlanIndex }
winlink1000HbsBridgeMembershipTable			N/A	Holds the bridge membership relations for all the registered HSUs.
winlink1000HbsBridgeMembershipEntry			N/A	HBS bridge membership table entry. INDEX { winlink1000HbsBridgeMembershipIndex }
winlink1000HbsServiceVlanTable			N/A	Holds the Vlan operations towards all the registered HSUs.
winlink1000HbsServiceVlanEntry			N/A	HBS service Vlan table entry. INDEX { winlink1000HbsServiceVlanIndex }
winlink1000HbsServiceQoSTable			N/A	Holds the QoS operations towards all the registered HSUs.
winlink1000HbsServiceQoSEntry			N/A	HBS service QoS table entry. INDEX { winlink1000HbsServiceQoSIndex }
winlink1000HbsServiceRadiusServerTable			N/A	Holds the Radius Server configurations
winlink1000HbsServiceRadiusServerEntry			N/A	HBS service Radius server table entry. INDEX { winlink1000HbsServiceRadiusServerIndex }
winlink1000HbsServiceCategoryTable			N/A	Holds the Radius Service Category profiles
winlink1000HbsServiceCategoryEntry			N/A	HBS service Radius Service Category table entry. INDEX { winlink1000HbsServiceCategoryIndex }
winlink1000HbsPerformanceMonitorThresholdTable			N/A	Holds the performance monitor thresholds towards all the registered HSUs.
winlink1000HbsPerformanceMonitorThresholdEntry			N/A	HBS performance monitor threshold table entry. INDEX { winlink1000HbsPerformanceMonitorThresholdIndex }



Table 4-2: Private MIB Parameters - HBS (Sheet 26 of 38)

Name	OID	Type	Access	Description
winlink1000HbsPerfMonAirGenCurrTable			N/A	This table defines/keeps the ethernet counters of the current 15 min interval.
winlink1000HbsPerfMonAirGenCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000HbsPerfMonAirGenIntervalTable			N/A	This table defines/keeps the ethernet counters of the last day (in resolution of 15 min intervals).
winlink1000HbsPerfMonAirGenIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000HbsPerfMonAirGenIntervalIdx }
winlink1000HbsPerfMonAirGenDayTable			N/A	This table defines/keeps the ethernet counters of the last month (in resolution of days).
winlink1000HbsPerfMonAirGenDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000HbsPerfMonAirGenDayIdx }
winlink1000OduAdmPMPSUSupport			RO	Indicates that PMP SU license is activated
winlink1000OduSrvRingTopologySupported			RO	Ring Topology options are: supported not supported
winlink1000OduSrvRingVlanIdIndex			RO	Index of VLAN ID of the internal ring messages.
winlink1000OduSrvRingEthStatus			RO	Represents the Ethernet service blocking state of a Rings link
winlink1000OduSrvQoSConfIndex			RO	Index of QoS Configuration.
winlink1000OduSrvConfVlanQGroups			RO	Frames classification according to VLAN Priority IDs.
winlink1000OduSrvConfDiffServQGroups			RO	Frames classification according to Diffserv.
winlink1000OduSrvQoSMaxRTQueuePercent			RO	Maximal percent for RT & NRT queues.
winlink1000OduSrvVlanSupport			RO	ODU Ethernet port VLAN support and configuration availability indication. 1 - ODU VLAN Functionality Not Supported 2 - ODU VLAN Functionality Supported 3 - ODU VLAN Functionality Supported and Available
winlink1000OduBridgeBasePortIndex			RO	ODU Bridge Port Number.
winlink1000OduBridgeBasePortIndex			RO	IfIndex corresponding to ODU Bridge port.
winlink1000OduAirChainsRxPower			RO	Received Signal Strength of Cpe chains in dBm. Chain 1 RSS: (1 Byte) Chain 2 RSS: (1 Byte) Chain 3 RSS: (1 Byte)
winlink1000OduAirCurrentRateCBW			RO	CBW of current air rate.
winlink1000OduAirCurrentRateGI			RO	GI of current air rate.
winlink1000OduAirChannelsIndex			RO	Channel Index.
winlink1000OduAirChannelsFrequency			RO	Channel frequency in MHz.
winlink1000OduAirChannelsAvail			RO	Channel state. Product specific and cannot be changed by the user. Automatic Channel Selection uses channels that are AirChannelsOperState enabled and AirChannelsAvail enabled. Valid values: disabled (0) enabled (1).
winlink1000OduAirChannelsDefaultFreq			RO	Default channel's availability for all CBWs. The valid values are: forbidden (0) available (1).
winlink1000OduAirRateIndex			RO	Air Rate index.
winlink1000OduAirRateAvail			RO	Air Rate availability depending on air interface conditions.

Table 4-2: Private MIB Parameters - HBS (Sheet 27 of 38)

Name	OID	Type	Access	Description
winlink1000OduAirHssRfpTdmChannelBW5MHz			RO	Represents the compatibility of TDM service under Channel BW of 5MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpTdmChannelBW10MHz			RO	Represents the compatibility of TDM service under Channel BW of 10MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpTdmChannelBW20MHz			RO	Represents the compatibility of TDM service under Channel BW of 20MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpTdmChannelBW40MHz			RO	Represents the compatibility of TDM service under Channel BW of 40MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssDiscoverIndex			RO	HSS Discover Table Index.
winlink1000OduAirHssDiscoverODUDescription			RO	Hold ODU HSS status in compress format: Domain IP HSS Role Hss support Enabled HSS protocol Sync Status Location IPv6.
winlink1000OduAirHssAssociatedCUIndex			RO	Associated Ethernet HSS Clients Table Index. Releant for Ethernet HSS Masters only.
winlink1000OduAirHssAssociatedCUDescription			RO	Holds Associated Ethernet HSS Clients Description in compress format: IP Delay Compatibility Ethernet Speed Ethernet Rx rate IPv6
winlink1000OduPerfMonIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonIntervalUAS			RO	The current number of Unavailable Seconds per interval.
winlink1000OduPerfMonIntervalES			RO	Current number of Errored Seconds per interval.
winlink1000OduPerfMonIntervalSES			RO	Current number of Severely Errored Seconds per interval.
winlink1000OduPerfMonIntervalBBE			RO	Current number of Background Block Errors per interval.
winlink1000OduPerfMonIntervalIntegrity			RO	Indicates the integrity of the entry per interval.
winlink1000OduPerfMonIntervalCompressed			RO	Holds a compressed string of all data per interface. Compressed Air Interface Structure (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) MinRSL (1) MaxRSL (1) RSLThresh1Exceeded (4) RSLThresh2Exceeded (4) MinTSL (1) MaxTSL (1) TSLThresh1Exceed (4) BBERThresh1Exceed (4) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) Compressed Etherent ODU interface (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) ActiveSeconds (1)
winlink1000OduPerfMonDayIdx			RO	This table is indexed per interval number. Each interval is of 24 hours and the oldest is 30.
winlink1000OduPerfMonDayUAS			RO	The current number of Unavailable Seconds per interval of 24 hours.
winlink1000OduPerfMonDayES			RO	Current number of Errored Seconds per interval of 24 hours.
winlink1000OduPerfMonDaySES			RO	Current number of Severely Errored Seconds per interval of 24 hours.
winlink1000OduPerfMonDayBBE			RO	Current number of Background Block Errors per interval of 24 hours.
winlink1000OduPerfMonDayIntegrity			RO	Indicates the integrity of the entry per interval of 24 hours.



Table 4-2: Private MIB Parameters - HBS (Sheet 28 of 38)

Name	OID	Type	Access	Description
winlink1000OduPerfMonDayCompressed			RO	Holds a compressed string of all data per interface. Compressed Air Interface Structure (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) MinRSL (1) MaxRSL (1) RSLThresh1Exceeded (4) RSLThresh2Exceeded (4) MinTSL (1) MaxTSL (1) TSLThresh1Exceeded (4) BBERThresh1Exceed (4) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) Compressed Ethernet ODU interface (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) ActiveSeconds (1)
winlink1000OduPerfMonAirIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonAirIntervalMinRSL			RO	Current Min Received Level Reference per interval.
winlink1000OduPerfMonAirIntervalMaxRSL			RO	Current Max Received Level Reference per interval.
winlink1000OduPerfMonAirIntervalRSLThresh1Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL1 threshold per interval.
winlink1000OduPerfMonAirIntervalMinTSL			RO	Current Min Transmit Signal Level per interval.
winlink1000OduPerfMonAirIntervalMaxTSL			RO	Current Max Transmit Signal Level per interval.
winlink1000OduPerfMonAirIntervalTSLThresh1Exceed			RO	Number of seconds Transmit Signal Level exceeded the TSL1 threshold per interval.
winlink1000OduPerfMonAirIntervalBBERThresh1Exceed			RO	Number of seconds Background Block Error Ratio exceeded the BBER1 threshold per interval.
winlink1000OduPerfMonAirDayIdx			RO	This table is indexed per Day number. Each Day is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonAirDayMinRSL			RO	Current Min Received Level Reference per Day.
winlink1000OduPerfMonAirDayMaxRSL			RO	Current Max Received Level Reference per Day.
winlink1000OduPerfMonAirDayRSLThresh1Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL1 threshold per Day.
winlink1000OduPerfMonAirDayRSLThresh2Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL2 threshold per Day.
winlink1000OduPerfMonAirDayMinTSL			RO	Current Min Transmit Signal Level per Day.
winlink1000OduPerfMonAirDayMaxTSL			RO	Current Max Transmit Signal Level per Day.
winlink1000OduPerfMonAirDayTSLThresh1Exceed			RO	Number of seconds Transmit Signal Level exceeded the TSL1 threshold per Day.
winlink1000OduPerfMonAirDayBBERThresh1Exceed			RO	Number of seconds Background Block Error Ratio exceeded the BBER1 threshold per Day.
winlink1000OduPerfMonEthIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonEthIntervalRxMBytes			RO	Current RX Mega Bytes per interval.

Table 4-2: Private MIB Parameters - HBS (Sheet 29 of 38)

Name	OID	Type	Access	Description
winlink1000OduPerfMonEthIntervalTxMBytes			RO	Current Transmit Mega Bytes per interval.
winlink1000OduPerfMonEthIntervalEthCapacityThreshUnder			RO	The number of times throughput was below threshold in the each interval. Relevant for point to point systems.
winlink1000OduPerfMonEthIntervalHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold in the each interval.
winlink1000OduPerfMonEthIntervalActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked in the each interval.
winlink1000OduPerfMonEthDayIdx			RO	This table is indexed per Day number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonEthDayRxMBytes			RO	Current RX Mega Bytes per day.
winlink1000OduPerfMonEthDayTxMBytes			RO	Current Transmit Mega Bytes per day.
winlink1000OduPerfMonEthDayEthCapacityThreshUnder			RO	The number of times throughput was below threshold each day. Relevant for point to point systems.
winlink1000OduPerfMonEthDayHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold each day.
winlink1000OduPerfMonEthDayActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked each day.
winlink1000OduPerfMonTdmIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonTdmIntervalActiveSeconds			RO	Parameter indicating whether the TDM service was active. Under TDM backup link the parameter indicates whether the backup link was active.
winlink1000OduPerfMonTdmDayIdx			RO	This table is indexed per Day number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonTdmDayActiveSeconds			RO	Parameter indicating whether the TDM service was active. Under TDM backup link the parameter indicates whether the backup link was active.
winlink1000OduAgnCurrAlarmCounter			RO	A running counter of active alarms. The counter is incremented for every new RAISED trap. It is cleared after a device reset.
winlink1000OduAgnCurrAlarmSeverity			RO	Current Alarm severity.
winlink1000OduAgnCurrAlarmId			RO	Unique Alarm Identifier (combines alarm type and interface). The same AlarmId is used for RAISED and CLEARED alarms.
winlink1000OduAgnCurrAlarmIfIndex			RO	Interface Index where the alarm occurred. Alarms that are not associated with a specific interface will have the following value: 65535.
winlink1000OduAgnCurrAlarmUnit			RO	Unit associated with the alarm.
winlink1000OduAgnCurrAlarmTrapID			RO	ID of the raised trap that was sent when this alarm was raised.
winlink1000OduAgnCurrAlarmTimeT			RO	Timestamp of this alarm. This number is in seconds from Midnight January 1st 1970.
winlink1000OduAgnCurrAlarmText			RO	Alarm display text (same as the text in the sent trap).
winlink1000IduAdmProductType			RO	IDU configuration description.

Table 4-2: Private MIB Parameters - HBS (Sheet 30 of 38)

Name	OID	Type	Access	Description
winlink1000IduAdmHwRev			RO	IDU Hardware Revision.
winlink1000IduAdmSwRev			RO	IDU Software Revision.
winlink1000OduAdmNumOfExternalAlarmIn			RO	Indicates the number of currently available External Alarm Inputs.
winlink1000OduAdmExternAlarmInIndex			RO	This value indicates the index of the External Alarm Input entry.
winlink1000OduAdmExternAlarmInStatus			RO	This value indicates the current status of the External Alarm Input.
winlink1000IduAdmSN			RO	IDU Serial Number
winlink1000IduAdmMountedTrunks			RO	Number of mounted trunks in the IDU
winlink1000IduAdmLicensedTrunks			RO	Number of Licensed Trunks in the IDU
winlink1000IduAdmVlanSupported			RO	Identifies if the local IDU supports VLAN tag/untag
winlink1000IduSrvServices			RO	This parameter is reserved to the Manager application provided with the product.
winlink1000IduSrvActiveTrunks			RO	A bitmap describing the currently open TDM trunks.
winlink1000IduSrvAvailableTrunks			RO	A bitmap describing the number of TDM trunks that can be opened in the current configuration. The values take into account the IDU hardware configuration the air rate and the installation range.
winlink1000IduSrvPossibleServicesIndex			RO	Table index Rate index of the air interface.
winlink1000IduSrvPossibleTdmServices			RO	Deprecated parameter. A bitmap describing the TDM trunks that can be opened in the corresponding Air Rate.
winlink1000IduSrvPossibleEthServices			RO	Deprecated parameter. This parameter describes if the Ethernet Service can be opened in the corresponding Air Rate. The valid values are: disabled (0) enabled (1).
winlink1000IduSrvRemainingRate			RO	Current Ethernet bandwidth in bps per air rate.
winlink1000IduSrvTrunkCost			RO	Cost of the TDM Service in bps.
winlink1000IduSrvAvailServicesIndex			RO	Table index. The index is the bit mask of the TDM service.
winlink1000IduSrvAvailServicesState			RO	Represents the TDM service availability.
winlink1000IduSrvAvailServicesMinRateIdx			RO	Minimum rate index of the air interface which make the service possible.
winlink1000IduSrvAvailServicesMaxRateIdx			RO	Maximum rate index of the air interface which make the service possible.
winlink1000IduSrvAvailServicesReason			RO	Information about the TDM Service availability. - Not Applicable if the service is available. The reasons for TDM Service unavailability: - The available throughput isn't sufficient for Service demands; - The IDU HW doesn't support the service; - A Link Password mismatch was detected; - The external pulse type detected is improper for TDM services; - A Software versions mismatch was detected. - A-Symmetric TDD Mode Is Obligated.
winlink1000IduSrvEthActive			RO	Represents the Ethernet service activation state.
winlink1000IduSrvEthAvailable			RO	Represents the Ethernet service availability state.

Table 4-2: Private MIB Parameters - HBS (Sheet 31 of 38)

Name	OID	Type	Access	Description
winlink1000IduSrvEthThroughput			RO	Current available Ethernet service throughput in bps.
winlink1000IduSrvAvailableTrunksT1			RO	A bitmap describing the TDM trunks that can be opened under T1 configuration. The values take into account the IDU hardware configuration the air rate and the installation range.
winlink1000IduEthernetIfIndex			RO	If Index corresponding to this Interface.
winlink1000IduEthernetIfAddress			RO	IDU MAC address.
winlink1000IduEthernetNumOfLanPorts			RO	Number of LAN interfaces in the IDU.
winlink1000IduEthernetNumOfSfpPorts			RO	The number of SFP interfaces in the IDU.
winlink1000IduEthernetSfpProperties			RO	SFP venfor properties : Vendor Name PN and Revision.
winlink1000IduEthernetOduInErrors			RO	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
winlink1000IduTdmTxClockAvailStates			RO	Available states of the TDM Transmit Clock Control each input status is represented by a bit. When the state is available the bit value is 1. When the state is unavailable the bit value is 0. The available states are: bit 2 = Transparent bit 3 = Local Loop Timed bit 4 = Remote Loop Timed bit 5 = Local Internal bit 6 = Remote Internal
winlink1000IduTdmTxClockActualState			RO	Actual state of the TDM Transmit Clock Control.
winlink1000IduTdmMasterClockAvailOptions			RO	Available options of the TDM Master Clock Control each input status is represented by a bit. When the option is available the bit value is 1. When the option is unavailable the bit value is 0. The available options are: bit 2 = Automatic bit 3 = Trunk #1 bit 4 = Trunk #2 bit 5 = Trunk #3 bit 6 = Trunk #4 When no options are available the returned value is: 1
winlink1000IduTdmMasterClockActual			RO	Actual Trunk used for TDM Master Clock.
winlink1000IduTdmConfigIndex			RO	Table index.
winlink1000IduTdmIfIndex			RO	Link index in the interface table.
winlink1000IduTdmLineStatus			RO	Line status.
winlink1000IduTdmCurrentIndex			RO	Table index (Same as winlink1000IduTdmLineIndex).
winlink1000IduTdmCurrentBlocks			RO	Number of correct blocks transmitted to the line.
winlink1000IduTdmCurrentDrops			RO	Number of error blocks transmitted to the line.
winlink1000IduTdmCurrentBlocksHigh			RO	High part of the 64 bits counter Current Blocks
winlink1000IduTdmRemoteQual			RO	Estimated average interval between error second events. The valid values are 1-2 <sup>31</sup> where a value of -1 is used to indicate an undefined state.
winlink1000IduTdmRemoteQualEval			RO	Estimated average interval between error second events during evaluation process. The valid values are 1-2 <sup>31</sup> where a value of -1 is used to indicate an undefined state.

Table 4-2: Private MIB Parameters - HBS (Sheet 32 of 38)

Name	OID	Type	Access	Description
winlink1000IduDtmBackupAvailableLinks			RO	Number of TDM backup trunks.
winlink1000IduDtmBackupIndex			RO	Table index.
winlink1000IduDtmBackupCurrentActiveLink			RO	TDM backup current active link: N/A air link is active or external link is active.
winlink1000IduDtmJitterBufferDefaultSize			RO	TDM Jitter Buffer Default Size. The units are 0.1 x millisecond.
winlink1000IduDtmJitterBufferMinSize			RO	TDM Jitter Buffer Minimum Size. The units are 0.1 x millisecond.
winlink1000IduDtmJitterBufferMaxSize			RO	TDM Jitter Buffer Maximum Size. The units are 0.1 x millisecond.
winlink1000IduDtmLineStatusStr			RO	Line status.
winlink1000IduDtmHotStandbySupport			RO	Indicates if Hot Standby is supported.
winlink1000IduDtmHotStandbyOperationStatus			RO	The Link Actual Status.
winlink1000HbsBridgeVlanIndex			RO	HBS bridge Vlan table index.
winlink1000HbsPerformanceThresholdIndex			RO	HBS performance monitor threshold table index.
winlink1000HbsPerformanceIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000HbsPerformanceIntervalRxMBytes			RO	Current RX Mega Bytes per interval. (Represents the LAN traffic RX direction toward the HSU).
winlink1000HbsPerformanceIntervalTxMBytes			RO	Current Transmit Mega Bytes per interval. (Represents the LAN traffic TX direction from the HSU)
winlink1000HbsPerformanceIntervalEthCapacityThreshUnder			RO	The number of times throughput was below threshold in the each interval. Relevant for point to point systems.
winlink1000HbsPerformanceIntervalHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold in the each interval.
winlink1000HbsPerformanceIntervalActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked in the each interval.
winlink1000HbsPerformanceDayIdx			RO	This table is indexed per Day number. Each interval is of 15 minutes and the oldest is 96.
winlink1000HbsPerformanceDayRxMBytes			RO	Current RX Mega Bytes per day. (Represents the LAN traffic RX direction toward the HSU)
winlink1000HbsPerformanceDayTxMBytes			RO	Current Transmit Mega Bytes per day. (Represents the LAN traffic TX direction from the HSU)
winlink1000HbsPerformanceDayEthCapacityThreshUnder			RO	The number of times throughput was below threshold each day. Relevant for point to point systems.
winlink1000HbsPerformanceDayHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold each day.
winlink1000HbsPerformanceDayActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked each day.
winlink1000HsuAirState			RO	Holds the state of the HSU.



Table 4-2: Private MIB Parameters - HBS (Sheet 33 of 38)

Name	OID	Type	Access	Description
winlink1000HsuAirLinkState			RO	Holds the state of the HSU link.
winlink1000HsuAirHsuld			RO	Holds the HSU ID as sent by the HBS.
winlink1000HsuAirRemoteCompressedMon			RO	Holds all the configuration data of The HBS in compressed format. Fields Included: Rss (1 byte) Rss Balance (1 byte) Est. Tput (4 bytes) In Bytes of the whole sector (4 bytes) Out Bytes of the whole sector (4 bytes) In Frames of the whole sector (4 bytes) Out Frames of the whole sector (4 bytes) Max Throughput DownLink (4 bytes) Max Throughput UpLink (4 bytes) Rx Rate In Kbps of the whole sector (4 bytes) Tx Rate In Kbps of the whole sector (4 bytes) Rx Rate In Fps of the whole sector (4 bytes) Tx Rate In Fps of the whole sector (4 bytes) Peak Throughput in the DL direction in Kbps (4 bytes) Peak Throughput in the UL direction in Kbps (4 bytes) Tx Ratio (2 bytes) Chain 1 Rss (1 byte) Chain 2 Rss (1 byte) Chain 3 Rss (1 byte) HBS Current Rate Index (2 bytes) HBS Current Rate CBW (1 bytes) HBS Current Rate GI (1 bytes) Rx LAN 1 Rate In Kbps of the whole sector (4 bytes) Tx LAN 1 Rate In Kbps of the whole sector (4 bytes) Rx LAN 1 Rate In Fps of the whole sector (4 bytes) Tx LAN 1 Rate In Fps of the whole sector (4 bytes) Rx LAN 2 Rate In Kbps of the whole sector (4 bytes) Tx LAN 2 Rate In Kbps of the whole sector (4 bytes) Rx LAN 2 Rate In Fps of the whole sector (4 bytes) Tx LAN 2 Rate In Fps of the whole sector (4 bytes) SyncE Performance (1 byte) HBS EC Changes Counter (1 byte)
winlink1000HsuAirRemoteCompressedStatic			RO	Holds all the configuration data of the HBS in a compressed format. Helps the NMS to get info regarding new Unregistered links. Fields Included: Location (32 bytes) IP address (8 bytes in hexa) Subnet mask (8 bytes in hexa) HBS Antenna type (1 byte) HBS Agent Version (4 bytes) HBS Name (32 bytes)
winlink1000HsuAirAlignmentStatus			RO	Antenna Alignment status: -1 N/A (for non BSA products) 1 ISS (scanning for HBS) 2 CSA (Sync to HBS waiting for Evaluation command) 3 Bi-directional link 4 Evaluate 2x2 5 Evaluate 3x3 6 Alignment Finished.
winlink1000HsuAirAlignment3x3Step			RO	Step number out of total steps in Throughput evaluation for 3x3 scenario.
winlink1000HsuAirAlignment3x3TotalSteps			RO	Total steps in Throughput evaluation for 3x3 scenario.
winlink1000HsuAirAlignmentLastReportManualAngle			RO	The angle of the antenna. Used in the alignment process.
winlink1000HsuAirAlignmentLastReportTputUpSector			RO	Expected throughput for the whole sector in the Uplink direction in this angle.
winlink1000HsuAirAlignmentLastReportTputDownSector			RO	Expected throughput for the whole sector in the Downlink direction in this angle.
winlink1000HsuAirAlignmentLastReportMcsIndexUp			RO	MCS index of the link in the uplink direction.
winlink1000HsuAirAlignmentLastReportMcsIndexDown			RO	MCS index of the link in the downlink direction.
winlink1000HsuAirAlignmentLastReportState			RO	State of the Evaluation 1 Finished successfully 2 Partial Evaluation (Timeout Exceeded) 3 Evaluation Aborted (Timeout Exceeded) 4 Evaluation aborted (Unstable Antenna) 5 Evaluation aborted (Sync Lost) 6 Evaluation aborted (External command) 7 Evaluating.

Table 4-2: Private MIB Parameters - HBS (Sheet 34 of 38)

Name	OID	Type	Access	Description
winlink1000HsuAirAlignmentLastReportElectronicAnglesHsu			RO	Electronic angles of 3 chains in the HSU side separated by comma.
winlink1000HsuAirAlignmentLastReportElectronicAnglesHbs			RO	Electronic angles of 3 chains in the HBS side separated by comma.
winlink1000HsuAirAlignmentLastReportRss			RO	RSS on chain 1 2 and 3 (separated by comma)
winlink1000HsuAirCompressedMon			RO	Holds HSU monitor data in compressed format: HSU Rx Rate in Kbps (4) HSU Tx Rate in Kbps (4) HSU Rx Rate in Fps (4) HSU Tx Rate in Fps (4) HSU LAN 1 Rx Rate in Kbps (4) HSU LAN 1 Tx Rate in Kbps (4) HSU LAN 1 Rx Rate in Fps (4) HSU LAN 1 Tx Rate in Fps (4) HSU LAN 2 Rx Rate in Kbps (4) HSU LAN 2 Tx Rate in Kbps (4) HSU LAN 2 Rx Rate in Fps (4) HSU LAN 2 Tx Rate in Fps (4) 1588TC Performance (1) SyncE Performance (1) ATPC status (1) Installation confirmation required (1)
winlink1000HsuEthernetPoETemperature			RO	Holds the temperature (Celsius) of the POE component.
winlink1000HsuEthernetPoEEquConsumption			RO	Holds the consumption of the connected equipment (milliampere).
winlink1000HsuEthernetPoEEquVoltage			RO	Holds the voltage of the connected equipment (Volt).
winlink1000HsuAdminInstallationConfirmationRequired			RO	Installation Confirmation required for Radius mode. 1- true 2- false
winlink1000HsuAdminSiteSurveySupport			RO	This value indicates if site survey is supported or not supported.
winlink1000OduSrvRingLinkMode			RW	Mode of the link regarding ring topology.
winlink1000OduSrvRingVlanId			RW	VLAN ID of the internal ring messages. Valid values are 1 to 4094. Initial value is 0 meaning VLAN unaware.
winlink1000OduSrvRingMaxAllowedTimeFromLastRpm			RW	Defines the minimal time (in ms) required for determination of ring failure.
winlink1000OduSrvRingWTR			RW	Defines the minimal time (in ms) required for ring recovery.
winlink1000OduSrvQoSMode			RW	Mode of QoS feature.
winlink1000OduSrvConfQueMir			RW	Desired Private MIR.
winlink1000OduSrvConfQueWeight			RW	QoS queue's weights in percent.
winlink1000OduSrvQoS VlanQGroupsSetStr			RW	Frames classification according to VLAN IDs string for set.
winlink1000OduSrvQoS DiffservQGroupsSetStr			RW	Frames classification according to Diffserv IDs string for set.
winlink1000OduSrvVlanIngressMode			RW	ODU Ethernet port ingress VLAN mode.
winlink1000OduSrvVlanEgressMode			RW	ODU Ethernet port egress VLAN mode.
winlink1000OduSrvEgressTag			RW	ODU ethernet port egress VLAN tag. Right most digit is Vlan priority (0-7) other digits compose Vlan Id (2-4094)
winlink1000OduSrvEgressProviderTag			RW	ODU ethernet port egress Provider VLAN tag. Right most digit is Vlan priority (0-7) other digits compose Vlan Id (2-4094)

Table 4-2: Private MIB Parameters - HBS (Sheet 35 of 38)

Name	OID	Type	Access	Description
winlink1000OduSrvVlanIngressAllowedVIDs			RW	ODU ethernet port VLAN IDs that will not be filtered on ingress. w w w w w w w w  ( where w = {0-4094} and w != 1 )
winlink1000OduSrvVlanDisable			RW	Disable VLAN functionality. The following values can be set: 3 - Disable ODU & IDU VLAN Configurations.
winlink1000OduAirChannelsOperState			RW	Channel state. Can be set by the user. Automatic Channel Selection uses channels that are AirChannelsOperState enabled and AirChannelsAvail enabled. A change is effective after link re-synchronization. Valid values: disabled (0) enabled (1). Rewriteable only in Point-To-Point products.
winlink1000OduAirHssSatellitesSatSyncRequired			RW	Satellites Synchronization Is Required
winlink1000OduAirCapacityDirection			RW	Capacity direction of the site.
winlink1000OduAirSpectrumAnalysisTimeout			RW	Spectrum analysis timeout in seconds.
winlink1000OduAirPreferredChannelsStr			RW	A string representing the preferred channels. Each character represents one channel when '1' means its preferred and '0' means its not.
winlink1000OduAirSyncLossThreshold			RW	When the current throughput is below this threshold (in Kbps) sync loss will occur.
winlink1000OduAirALPMDataBufferStr			RW	A string that holds all of the ALPM events data
winlink1000OduAgnGenLocalConnectionMode			RW	Local Connection (Broadcast) Configuration Mode. Options are: 1 - SNMP Read-Write 2 - SNMP Read-Only.
winlink1000OduAdmExternAlarmInText			RW	This field describes the External Alarm Input. It is an optional string of no more than 64 characters which will be used in the event being sent as a result of a change in the status of the External Alarm Input. DEFVAL {Alarm Description}
winlink1000OduAdmExternAlarmInAdminState			RW	This value indicates if this External Alarm Input is enabled or disabled.
winlink1000IduAdmIduDetectionMode			RW	The parameter defines whether to send Ethernet frames to detect an IDU. The valid writable values are: userDisabled (3) userEnabled (4). A change requires a reset and is effective after reset.
winlink1000IduAdmVlanEgressMode			RW	VLAN tag/untag egress values
winlink1000IduAdmVlanIngressMode			RW	VLAN tag/untag ingress values
winlink1000IduAdmVlanDefaultPortVIDs			RW	VLAN tag/untag default VLAN ids for each port - Right most digit is Vlan priority (0-6) other digits compose Vlan Id (1-4094)
winlink1000IduAdmVlanLan1UntaggedVIDs			RW	VLAN untagged VIDs for LAN1 port
winlink1000IduAdmVlanLan2UntaggedVIDs			RW	VLAN untagged VIDs for LAN2 port
winlink1000IduAdmVlanSfpUntaggedVIDs			RW	VLAN untagged VIDs for Sfp port
winlink1000IduAdmVlanLan1FilteredVIDs			RW	VLAN filtered VIDs for LAN1 port
winlink1000IduAdmVlanLan2FilteredVIDs			RW	VLAN filtered VIDs for LAN2 port
winlink1000IduAdmVlanSfpFilteredVIDs			RW	VLAN filtered VIDs for Sfp port

Table 4-2: Private MIB Parameters - HBS (Sheet 36 of 38)

Name	OID	Type	Access	Description
winlink1000IduAdmPort sConnection			RW	IDU ports connection bitmap. bit 0 - LAN1-LAN2 bit 1 - SFP-LAN1 bit 2 - SFP-LAN2 bit values: 0 - ports are disconnected. 1 - ports are connected.
winlink1000IduAdmVlan Mode			RW	Local IDU Vlan Mode.
winlink1000IduAdmVlan MembershipVIDs			RW	VLAN Membership VLAN IDs list.
winlink1000IduAdmVlan MembershipPortsCode			RW	VLAN Membership ports code. Each value represent the relation (bitmap) Between the suitable VID to the IDU ports. bit 0 - LAN1 bit 1 - LAN2 bit 2 - SFP bit value 0 - not member of appropriate VID bit value 1 - member of appropriate VID
winlink1000IduAdmVlan MembershipUntaggedH andle			RW	VLAN Membership Untagged frames handling. The 3 values representing LAN1 LAN2 and SFP accordingly. For each port the optional values are: 1 - Discard 2 - Tag 3 - Leave Unmodified
winlink1000IduAdmVlan MembershipTagUntagge d			RW	VLAN Membership Untagged frames tagging. The 3 values representing LAN1 LAN2 and SFP accordingly. The value on each port entry represent the tagging value which is built of: VLAN ID & VLAN Priority.
winlink1000IduSrvDesir edTrunks			RW	Required trunks bitmap. Note that the number of possible trunks that can be configured may vary based on the IDU hardware configuration the selected air interface rate and the range of the installation. The provided Manager application enables the user to select only available configurations. A change is effective immediately if applied to a master unit and the link is in service mode.
winlink1000IduSrvEthM axInfoRate			RW	Holds the maximum bandwidth (kbps) to be allocated for Ethernet service. Value of zero means that Ethernet service works as best effort. The maximum value is product specific. Refer to the user manual.
winlink1000IduBridgeTp Aging			RW	Timeout in seconds for aging. Note that for this parameter to be effective the ODU must be configured to HUB mode. A change is effective immediately.
winlink1000IduTdmTxCl ockDesiredState			RW	Required state of the TDM Transmit Clock Control. A change is effective after re-activation of the TDM service.
winlink1000IduTdmMas terClockDesired			RW	Required TDM Master Clock. A change is effective after re-activation of the TDM service.
winlink1000IduTdmLine Coding			RW	This parameter applies to T1 trunks only. The parameter controls the line coding. Setting the value to each of the indices applies to all. A change is effective after the next open of the TDM service.
winlink1000IduTdmLoop backConfig			RW	Loop back configuration table. Each of the trunks can be set Normal Line loop back or Reverse line loop back. A change is effective immediately.
winlink1000IduTdmCurr entTxClock			RW	TDM Transmit Clock. A change is effective after re-activation of the TDM service.
winlink1000IduTdmSrvE val			RW	Evaluated TDM service bit mask. Setting this parameter to value that is bigger than the activated TDM service bit mask will execute the evaluation process for 30 seconds. Setting this parameter to 0 will stop the evaluation process immediately.
winlink1000IduTdmBack upMode			RW	TDM backup mode: Enable or Disable where the main link is the air link or the external link. Changes will be effective immediatly.
winlink1000IduTdmJitte rBufferSize			RW	TDM Jitter Buffer Size. The value must be between the minimum and the maximum TDM Jitter Buffer Size. The units are 0.1 x millisecond.

Table 4-2: Private MIB Parameters - HBS (Sheet 37 of 38)

Name	OID	Type	Access	Description
winlink1000IduTdmJitterBufferSizeEval			RW	TDM Jitter Buffer Size for evaluation. The value must be between the minimum and the maximum TDM Jitter Buffer Size. The units are 0.1 x millisecond.
winlink1000IduTdmType			RW	TDM Type (The value undefined is read-only).
winlink1000IduTdmTypeEval			RW	TDM Type for evaluation.
winlink1000IduTdmDesiredHotStandbyMode			RW	Desired Hot Standby Mode.
winlink1000IduTdmBackupLinkConfiguration			RW	The current configuration of the backup link.
winlink1000IduTdmLineInterfaceConfiguration			RW	TDM Line interface configuration.
winlink1000IduTdmLineImpedanceConfiguration			RW	TDM line impedance configuration (standardT1 - 100Ohm nonStandardT1 - 110Ohm) Applicable only for T1 TDM type.
winlink1000HbsAirConfigAutoRealignmentConfiguration			RW	Configuration Parameters For Auto Realignment.
winlink1000HbsAirMinimalTimeBetweenAutoRealignment			RW	Minimal time in seconds between two Automatic Realignment Processes
winlink1000HbsBridgeVlanIngress			RW	HBS bridge Vlan ingress.
winlink1000HbsBridgeVlanEgress			RW	HBS bridge Vlan egress.
winlink1000HbsBridgeVlanFilterIn			RW	HBS bridge Vlan filter in.
winlink1000HbsBridgeVlanFilterOut			RW	HBS bridge Vlan filter out.
winlink1000HbsBridgeVlanDoubleTag			RW	HBS bridge Vlan double tag.
winlink1000HbsBridgeVlanDefaultId			RW	HBS bridge Vlan default id.
winlink1000HbsAdminRemoteTrapGenerationMode			RW	HBS generation of remote traps (1=Off 2=On)
winlink1000HsuAirLocalDeregister			RW	Performs Local HSU Deregistration when - only when the link is off.
winlink1000HsuAirRssThresholdSync			RW	HSUs will be synchornized immediately if RSS is better than threshold.
winlink1000HsuAirAlignmentCmd			RW	1 Start Alignment process and initialize the GIRO 2 Evaluate current manual angle 3 Finish Alignment process 4 Abort Alignment process 5 Evaluate best manual angle 6 Stop Alignment process
winlink1000HsuAirAlignmentEvalTo			RW	Evaluation timeout.
winlink1000HsuAirReAlignmentOnStartupEnable			RW	Should HSU perform Realignment every syncloss.
winlink1000HsuServiceCommandStr			RW	Ability to perform special command in the HSU. Format (string): Operation Param1 Param2 ....  ParamN.
winlink1000HsuServiceHsuType			RW	HSU type (1 = Fixed 2 = Stationary 3 = Mobile 4 = Transport)
winlink1000HsuServiceHsuLevel			RW	HSU level (1 .. 4)



Table 4-2: Private MIB Parameters - HBS (Sheet 38 of 38)

Name	OID	Type	Access	Description
winlink1000HsuAdminSiteSurveyMode			RW	This value indicates if site survey is activated or not activated.
winlink1000OduPerfMonAirIntervalRSLThresholdExceed			RO	Number of seconds Receive Signal Level exceeded the RSL2 threshold ACCESS read-only per interval.
winlink1000IduEthernetGbeSupported			RO	read-only
winlink1000HsuEthernetPoESupported			RO	read-only

## 4.2.2 HSU

Table 4-3: Private MIB Parameters - HSU (Sheet 1 of 37)

Name	OID	Type	Access	Description
winlink1000OduAdmProductType	1.3.6.1.4.1.4458.1000.1.1.1	DisplayString	RO	ODU configuration description.
winlink1000OduAdmBroadcast	1.3.6.1.4.1.4458.1000.1.1.10	Integer	RW	This parameter is reserved for the Manager application provided with the product.
winlink1000OduAdmHostsIndex	1.3.6.1.4.1.4458.1000.1.1.12.1.1	Integer	RO	Trap destinations table index.
winlink1000OduAdmHostsIp	1.3.6.1.4.1.4458.1000.1.1.12.1.2	IPAddress	RW	Trap destination IP address. A change is effective immediately.
winlink1000OduAdmHostsPort	1.3.6.1.4.1.4458.1000.1.1.12.1.3	Integer	RW	UDP port of the trap destination. A change is effective immediately.
winlink1000OduAdmHostsSecurityModel	1.3.6.1.4.1.4458.1000.1.1.12.1.4	Integer	RW	Security model used for this trap generation.
winlink1000OduAdmHostsUserName	1.3.6.1.4.1.4458.1000.1.1.12.1.5	DisplayString	RW	User name used to generate the snmpv3 trap.
winlink1000OduAdmHostsPassword	1.3.6.1.4.1.4458.1000.1.1.12.1.6	DisplayString	RW	Password used to generate the snmpv3 trap.
winlink1000OduAdmHostsIPv6	1.3.6.1.4.1.4458.1000.1.1.12.1.7	DisplayString	RW	Trap destination IPv6 address. A change is effective immediately.
winlink1000OduBuzzerAdminState	1.3.6.1.4.1.4458.1000.1.1.13	Integer	RW	This parameter controls the activation of the buzzer while the unit is in install mode. A change is effective immediately. The valid values are: disabled (0) enabledAuto (1) enabledConstantly(2) advancedAuto (3).
winlink1000OduProductId	1.3.6.1.4.1.4458.1000.1.1.14	DisplayString	RO	This parameter is reserved for the Manager application provided with the product.
winlink1000OduReadCommunity	1.3.6.1.4.1.4458.1000.1.1.15	DisplayString	RW	Read Community String. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Read Community String. The SNMP agent accepts only encrypted values.
winlink1000OduReadWriteCommunity	1.3.6.1.4.1.4458.1000.1.1.16	DisplayString	RW	Read/Write Community String. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Read/Write Community String. The SNMP agent accepts only encrypted values.
winlink1000OduTrapCommunity	1.3.6.1.4.1.4458.1000.1.1.17	DisplayString	RW	Trap Community String. This parameter is used by the Manager application to change the Trap Community String. The SNMP agent accepts only encrypted values.
winlink1000OduAdmSnmpAgentVersion	1.3.6.1.4.1.4458.1000.1.1.18	Integer	RO	Major version of the SNMP agent.
winlink1000OduAdmRemoteSiteName	1.3.6.1.4.1.4458.1000.1.1.19	DisplayString	RO	Remote site name. Returns the same value as sysLocation parameter of the remote site.
winlink1000OduAdmHwRev	1.3.6.1.4.1.4458.1000.1.1.2	DisplayString	RO	ODU Hardware Version.
winlink1000OduAdmSnmpAgentMinorVersion	1.3.6.1.4.1.4458.1000.1.1.20	Integer	RO	Minor version of the SNMP agent.
winlink1000OduAdmLinkPassword	1.3.6.1.4.1.4458.1000.1.1.21	DisplayString	RW	Link Password. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Link Password. The SNMP agent accepts only encrypted values.
winlink1000OduAdmSiteLinkPassword	1.3.6.1.4.1.4458.1000.1.1.22	DisplayString	RW	Site Link Password. This parameter always returns ***** when retrieving its value. It is used by the Manager application to change the Link Password of the site. The SNMP agent accepts only encrypted values.
winlink1000OduAdmDefaultPassword	1.3.6.1.4.1.4458.1000.1.1.23	Integer	RO	This parameter indicates if the current Link Password is the default password.

Table 4-3: Private MIB Parameters - HSU (Sheet 2 of 37)

Name	OID	Type	Access	Description
winlink1000OduAdmConnectionType	1.3.6.1.4.1.4458.1000.1.1.24	Integer	RO	This parameter indicates if the Manager application is connected to the local ODU or to the remote ODU over the air. A value of 'unknown' indicates community string mismatch.
winlink1000OduAdmBackToFactorySettingsCmd	1.3.6.1.4.1.4458.1000.1.1.25	Integer	RW	Back to factory settings Command. A change is effective after reset. The read value is always 0.
winlink1000OduAdmIPParamsCnfg	1.3.6.1.4.1.4458.1000.1.1.26	DisplayString	RW	ODU IP address Configuration. The format is: <IP_Address> <Subnet_Mask> <Default_Gateway>
winlink1000OduAdmVlanID	1.3.6.1.4.1.4458.1000.1.1.27	Integer	RW	VLAN ID. Valid values are 1 to 4094. Initial value is 0 meaning VLAN unaware.
winlink1000OduAdmVlanPriority	1.3.6.1.4.1.4458.1000.1.1.28	Integer	RW	VLAN Priority. 0 is lowest priority 7 is highest priority.
winlink1000OduAdmSN	1.3.6.1.4.1.4458.1000.1.1.29	DisplayString	RO	ODU Serial Number
winlink1000OduAdmSwRev	1.3.6.1.4.1.4458.1000.1.1.3	DisplayString	RO	ODU Software Version.
winlink1000OduAdmProductName	1.3.6.1.4.1.4458.1000.1.1.30	DisplayString	RO	This is the product name as it exists at EC
winlink1000OduAdmActivationKey	1.3.6.1.4.1.4458.1000.1.1.31	DisplayString	RW	Activates a general key.
winlink1000OduAdmRmtPermittedOduType	1.3.6.1.4.1.4458.1000.1.1.32	DisplayString	RW	Mobile Application: permitted partner OduType.
winlink1000OduAdmCPUID	1.3.6.1.4.1.4458.1000.1.1.33	Integer	RO	CPU ID
winlink1000OduAdmOvrCmd	1.3.6.1.4.1.4458.1000.1.1.34	DisplayString	RW	Ability to perform special command in the ODU.
winlink1000OduAdmLinkMode	1.3.6.1.4.1.4458.1000.1.1.35	Integer	RW	Unit PMP operation mode.
winlink1000OduAdmActualConnectMode	1.3.6.1.4.1.4458.1000.1.1.36	Integer	RO	Unit connected as part to ptp or ptmp.
winlink1000OduAdmAES256Support	1.3.6.1.4.1.4458.1000.1.1.37	Integer	RO	AES-256 security support indication.
winlink1000OduAdmAES256State	1.3.6.1.4.1.4458.1000.1.1.38	Integer	RW	Enable/Disable AES-256 security mode over the air link.
winlink1000OduAdmAES256Status	1.3.6.1.4.1.4458.1000.1.1.39	Integer	RO	AES256 operating status
winlink1000OduAdmLinkName	1.3.6.1.4.1.4458.1000.1.1.4	DisplayString	RW	Link Name. A change is effective immediately.
winlink1000OduAdmBatterySavingShutdownTime	1.3.6.1.4.1.4458.1000.1.1.40	Integer	RW	Battery Saving Shutdown Time in minutes 0 till battery run out -1 if not supported.
winlink1000OduAdmWiFiPowerMode	1.3.6.1.4.1.4458.1000.1.1.41	Integer	RW	WIFI unit power mode.
winlink1000OduAdmShutdownTimer	1.3.6.1.4.1.4458.1000.1.1.42	Integer	RO	Shutdown Timer in seconds.
winlink1000OduAdmGPSSState	1.3.6.1.4.1.4458.1000.1.1.43	Integer	RO	GPS state
winlink1000OduAdmTemperatureC	1.3.6.1.4.1.4458.1000.1.1.44	Integer	RO	The temperature (Celsius) inside the Board.
winlink1000OduAdmIPStackMode	1.3.6.1.4.1.4458.1000.1.1.45	Integer	RW	The IP stack mode.
winlink1000OduAdmIPv6ParamsCnfg	1.3.6.1.4.1.4458.1000.1.1.46	DisplayString	RW	ODU IPv6 address Configuration. The format is: <IP_Address> <Subnet_Mask> <Default_Gateway>
winlink1000OduAdmIPv6Address	1.3.6.1.4.1.4458.1000.1.1.47	DisplayString	RO	ODU IPv6 address.

Table 4-3: Private MIB Parameters - HSU (Sheet 3 of 37)

Name	OID	Type	Access	Description
winlink1000OduAdmIPv6Prefix	1.3.6.1.4.1.4458.1000.1.1.48	Integer	RO	ODU IPv6 subnet mask.
winlink1000OduAdmIPv6DefaultGateWay	1.3.6.1.4.1.4458.1000.1.1.49	DisplayString	RO	ODU IPv6 default gateway.
winlink1000OduAdmResetCmd	1.3.6.1.4.1.4458.1000.1.1.5	Integer	RW	Reset Command. A set command with a value of 3 will cause a device reset. HBS only: A set command with a value of 4 will cause a device reset for the entire sector. The read value is always 0.
winlink1000OduAdmPowerConsumption	1.3.6.1.4.1.4458.1000.1.1.50	Integer	RO	Power Consumption (mWatt)
winlink1000OduAdmWifiChannel	1.3.6.1.4.1.4458.1000.1.1.51.1	Integer	RW	Wifi Channel
winlink1000OduAdmWifiApStatus	1.3.6.1.4.1.4458.1000.1.1.51.10	Integer	RO	Wifi AP Status
winlink1000OduAdmWifiTxPower	1.3.6.1.4.1.4458.1000.1.1.51.2	Integer	RW	Wifi TX Power
winlink1000OduAdmWifiSSID	1.3.6.1.4.1.4458.1000.1.1.51.3	DisplayString	RO	Wifi SSID
winlink1000OduAdmWifiSecurityType	1.3.6.1.4.1.4458.1000.1.1.51.4	Integer	RO	Wifi Security type
winlink1000OduAdmWifiPassword	1.3.6.1.4.1.4458.1000.1.1.51.5	DisplayString	RW	Wifi Password
winlink1000OduAdmWifiNetwork	1.3.6.1.4.1.4458.1000.1.1.51.6	IPAddress	RW	Wifi Network
winlink1000OduAdmWifiRssi	1.3.6.1.4.1.4458.1000.1.1.51.7	Integer	RO	Wifi RSSI
winlink1000OduAdmWifiStationMAC	1.3.6.1.4.1.4458.1000.1.1.51.8	DisplayString	RO	Wifi Station MAC
winlink1000OduAdmWifiRestart	1.3.6.1.4.1.4458.1000.1.1.51.9	Integer	RW	A set command with a value of 1 will cause a Wifi restart. The read value is always 0.
winlink1000OduAdmBSAOperationMode	1.3.6.1.4.1.4458.1000.1.1.52	Integer	RO	BSA Operation Mode
winlink1000OduAdmMngConnection	1.3.6.1.4.1.4458.1000.1.1.53	DisplayString	RW	Management Connection
winlink1000OduAdm1588TCSupport	1.3.6.1.4.1.4458.1000.1.1.54	Integer	RO	Indicates that 1588TC license activated
winlink1000OduAdmSyncESupport	1.3.6.1.4.1.4458.1000.1.1.55	Integer	RO	Indicates that SyncE license activated
winlink1000OduAdmRadioRev	1.3.6.1.4.1.4458.1000.1.1.56	DisplayString	RO	Radio Revision
winlink1000OduAdmProductRev	1.3.6.1.4.1.4458.1000.1.1.57	DisplayString	RO	Product Revision
winlink1000OduAdmPMPUSupport	1.3.6.1.4.1.4458.1000.1.1.58	Integer	RO	Indicates that PMP SU license is activated
winlink1000OduAdmManagerDownloadURL	1.3.6.1.4.1.4458.1000.1.1.59	DisplayString	RW	This is the URL from which management tool can be downloaded
winlink1000OduAdmAddress	1.3.6.1.4.1.4458.1000.1.1.6	IPAddress	RW	ODU IP address. A change is effective after reset. The parameter is kept for backward compatibility. Using the alternative parameter: winlink1000OduAdmIpParamsCnfg is recommended.
winlink1000OduAdmAntennaDescription	1.3.6.1.4.1.4458.1000.1.1.60	DisplayString	RO	This is a description of the antenna connected to the ODU
winlink1000OduAdmSoftwareCapabilities	1.3.6.1.4.1.4458.1000.1.1.61	DisplayString	RO	This is used to describe which Software Capabilities the current ODU supports

Table 4-3: Private MIB Parameters - HSU (Sheet 4 of 37)

Name	OID	Type	Access	Description
winlink1000OduAdmMask	1.3.6.1.4.1.4458.1000.1.1.7	IPAddress	RW	ODU Subnet Mask. A change is effective after reset. The parameter is kept for backward compatibility. Using the alternative parameter: winlink1000OduAdmIpParamsCnfg is recommended.
winlink1000OduAdmGateway	1.3.6.1.4.1.4458.1000.1.1.8	IPAddress	RW	ODU default gateway. A change is effective after reset. The parameter is kept for backward compatibility. Using the alternative parameter: winlink1000OduAdmIpParamsCnfg is recommended.
winlink1000OduSrvMode	1.3.6.1.4.1.4458.1000.1.2.1	Integer	RW	System mode. The only values that can be set are installMode and slaveMode; normalMode reserved to the Manager application provided with the product. A change is effective after link re-synchronization.
winlink1000OduSrvBridging	1.3.6.1.4.1.4458.1000.1.2.3	Integer	RO	Bridging Mode. Valid values are: disabled (0) enabled (1).
winlink1000OduEthernetRemainingRate	1.3.6.1.4.1.4458.1000.1.3.1	Integer	RO	Current Ethernet bandwidth in bps.
winlink1000OduEthernetIfIndex	1.3.6.1.4.1.4458.1000.1.3.2.1.1	Integer	RO	ODU Ethernet Interface Index.
winlink1000OduEthernetIf1588v2PTPEventTXRate	1.3.6.1.4.1.4458.1000.1.3.2.1.10	Integer	RO	For debug use
winlink1000OduEthernetIfAddress	1.3.6.1.4.1.4458.1000.1.3.2.1.5	DisplayString	RO	ODU MAC address.
winlink1000OduEthernetIfAdminStatus	1.3.6.1.4.1.4458.1000.1.3.2.1.6	Integer	RW	Required state of the interface.
winlink1000OduEthernetIfOperStatus	1.3.6.1.4.1.4458.1000.1.3.2.1.7	Integer	RO	Current operational state of the interface.
winlink1000OduEthernetIfFailAction	1.3.6.1.4.1.4458.1000.1.3.2.1.8	Integer	RW	Failure action of the interface.
winlink1000OduEthernetIf1588v2PTPEventRXRate	1.3.6.1.4.1.4458.1000.1.3.2.1.9	Integer	RO	For debug use
winlink1000OduEthernetNumOfPorts	1.3.6.1.4.1.4458.1000.1.3.3	Integer	RO	Number of ODU network interfaces.
winlink1000OduEthernetGbeSupported	1.3.6.1.4.1.4458.1000.1.3.4	Integer	RO	read-only
winlink1000OduEthernetSfpProperties	1.3.6.1.4.1.4458.1000.1.3.5	DisplayString	RO	Sfp port properties.
winlink1000OduBridgeTpMode	1.3.6.1.4.1.4458.1000.1.4.4.101	Integer	RW	ODU bridge mode. A change is effective after reset. Valid values: hubMode (0) bridgeMode (1).
winlink1000OduBridgeConfigMode	1.3.6.1.4.1.4458.1000.1.4.4.102	Integer	RO	ODU bridge configuration mode
winlink1000OduBridgeTpPortIndex	1.3.6.1.4.1.4458.1000.1.4.4.3.1.1	Integer	RO	ODU Transparent Bridge Port Number.
winlink1000OduBridgeTpPortInBytes	1.3.6.1.4.1.4458.1000.1.4.4.3.1.101	Counter	RO	Number of bytes received by this port.
winlink1000OduBridgeTpPortOutBytes	1.3.6.1.4.1.4458.1000.1.4.4.3.1.102	Counter	RO	Number of bytes transmitted by this port.
winlink1000OduBridgeTpPortInFrames	1.3.6.1.4.1.4458.1000.1.4.4.3.1.3	Counter	RO	Number of frames received by this port.
winlink1000OduBridgeTpPortOutFrames	1.3.6.1.4.1.4458.1000.1.4.4.3.1.4	Counter	RO	Number of frames transmitted by this port.
winlink1000OduAirFreq	1.3.6.1.4.1.4458.1000.1.5.1	Integer	RW	Installation Center Frequency. Valid values are product dependent. A change is effective after link re-synchronization.



Table 4-3: Private MIB Parameters - HSU (Sheet 5 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirTxPower36	1.3.6.1.4.1.4458.1000.1.5.10	Integer	RW	Deprecated parameter. Actual behavior is read-only.
winlink1000OduAirTxPower48	1.3.6.1.4.1.4458.1000.1.5.11	Integer	RW	Deprecated parameter. Actual behavior is read-only.
winlink1000OduAirCurrentTxPower	1.3.6.1.4.1.4458.1000.1.5.12	Integer	RO	Current Transmit Power in dBm. This is a nominal value while the actual transmit power includes additional attenuation.
winlink1000OduAirMinFrequency	1.3.6.1.4.1.4458.1000.1.5.13	Integer	RO	Minimum center frequency in MHz.
winlink1000OduAirMaxFrequency	1.3.6.1.4.1.4458.1000.1.5.14	Integer	RO	Maximum center frequency in MHz.
winlink1000OduAirFreqResolution	1.3.6.1.4.1.4458.1000.1.5.15	Integer	RO	Center Frequency resolution. Measured in MHz if value < 100 otherwise in KHz.
winlink1000OduAirCurrentFreq	1.3.6.1.4.1.4458.1000.1.5.16	Integer	RO	Current Center Frequency. Measured in MHz if center frequency resolution value < 100 otherwise in KHz.
winlink1000OduAirNumberOfChannels	1.3.6.1.4.1.4458.1000.1.5.17	Integer	RO	Number of channels that can be used.
winlink1000OduAirDfsState	1.3.6.1.4.1.4458.1000.1.5.19	Integer	RO	Radar detection state. Valid values: disabled (0) enabled (1).
winlink1000OduAirDesiredRate	1.3.6.1.4.1.4458.1000.1.5.2	Integer	RW	Deprecated parameter actual behavior is read-only. Required Air Rate. For Channel Bandwidth of 20 10 5 MHz divide the value by 1 2 4 respectively.
winlink1000OduAirAutoChannelSelectionState	1.3.6.1.4.1.4458.1000.1.5.20	Integer	RO	Deprecated parameter. Indicating Automatic Channel Selection availability at current channel bandwidth. Valid values: disabled (0) enabled (1).
winlink1000OduAirEnableTxPower	1.3.6.1.4.1.4458.1000.1.5.21	Integer	RO	Indicating Transmit power configuration enabled or disabled.
winlink1000OduAirMinTxPower	1.3.6.1.4.1.4458.1000.1.5.22	Integer	RO	Minimum Transmit power in dBm.
winlink1000OduAirMaxTxPowerIndex	1.3.6.1.4.1.4458.1000.1.5.23.1.1	Integer	RO	Air interface rate index.
winlink1000OduAirMaxTxPower	1.3.6.1.4.1.4458.1000.1.5.23.1.2	Integer	RO	Maximum Transmit power in dBm.
winlink1000OduAirChannelBandwidth	1.3.6.1.4.1.4458.1000.1.5.24	Integer	RW	Channel bandwidth in KHz. A change is effective after reset.
winlink1000OduAirChannelBWIndex	1.3.6.1.4.1.4458.1000.1.5.25.1.1	Integer	RO	Channel Bandwidth index.
winlink1000OduAirChannelBWAvail	1.3.6.1.4.1.4458.1000.1.5.25.1.2	Integer	RO	Channel Bandwidth availability product specific. Options are: Not supported supported with manual channel selection supported with Automatic Channel Selection.
winlink1000OduAirChannelsAdminState	1.3.6.1.4.1.4458.1000.1.5.25.1.3	DisplayString	RO	Channels' availability per CBW.
winlink1000OduAirRFD	1.3.6.1.4.1.4458.1000.1.5.26	Integer	RO	Current radio frame duration in microseconds.
winlink1000OduAirDesiredRateIdx	1.3.6.1.4.1.4458.1000.1.5.28	Integer	RW	Required Air Rate index. 0 reserved for Adaptive Rate. A change is effective immediately after Set operation to the master side while the link is up.
winlink1000OduAirLinkDistance	1.3.6.1.4.1.4458.1000.1.5.29	Integer	RO	Link distance in meters. A value of -1 indicates an illegal value and is also used when a link is not established.
winlink1000OduAirSSID	1.3.6.1.4.1.4458.1000.1.5.3	DisplayString	RW	Reserved for the Manager application provided with the product. The Sector ID in Point-To-Multi-Point systems.
winlink1000OduAirLinkWorkingMode	1.3.6.1.4.1.4458.1000.1.5.30	Integer	RO	Link working mode as a result of comparing versions of both sides of the link. Possible modes are: Unknown - no link Normal - versions on both sides are identical with full compatibility with restricted compatibility or versions on both sides are different with software upgrade or versions incompatibility.

Table 4-3: Private MIB Parameters - HSU (Sheet 6 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirMajorLinkIfVersion	1.3.6.1.4.1.4458.1000.1.5.31	Integer	RO	Major link interface version
winlink1000OduAirMinorLinkIfVersion	1.3.6.1.4.1.4458.1000.1.5.32	Integer	RO	Minor link interface version
winlink1000OduAirTxPower	1.3.6.1.4.1.4458.1000.1.5.4	Integer	RW	Required Transmit power in dBm . This is a nominal value while the actual transmit power includes additional attenuation. The min and max values are product specific. A change is effective immediately.
winlink1000OduAirHssDesiredOpState	1.3.6.1.4.1.4458.1000.1.5.40.1	Integer	RW	Required Hub Site Synchronization operating state. For HssSyncUnits : For hssISU :[2 7] For hssGSU :[2 6] For HBS: [2 3 4 5]
winlink1000OduAirHssTime	1.3.6.1.4.1.4458.1000.1.5.40.10	DisplayString	RO	Hub Site Synchronization GPS time
winlink1000OduAirHssLatitude	1.3.6.1.4.1.4458.1000.1.5.40.11	DisplayString	RO	Hub Site Synchronization GPS Latitude
winlink1000OduAirHssNSIndicator	1.3.6.1.4.1.4458.1000.1.5.40.12	DisplayString	RO	Hub Site Synchronization GPS N/S Indicator
winlink1000OduAirHssLongitude	1.3.6.1.4.1.4458.1000.1.5.40.13	DisplayString	RO	Hub Site Synchronization GPS Longitude
winlink1000OduAirHssEWIndicator	1.3.6.1.4.1.4458.1000.1.5.40.14	DisplayString	RO	Hub Site Synchronization GPS E/W Indicator
winlink1000OduAirHssNumSatellites	1.3.6.1.4.1.4458.1000.1.5.40.15	DisplayString	RO	Hub Site Synchronization GPS Number of satellites
winlink1000OduAirHssAltitude	1.3.6.1.4.1.4458.1000.1.5.40.16	DisplayString	RO	Hub Site Synchronization GPS Altitude
winlink1000OduAirHssRfpPhase	1.3.6.1.4.1.4458.1000.1.5.40.17	Integer	RW	Hub Site Synchronization GPS RFP phase
winlink1000OduAirHssCurrentOpState	1.3.6.1.4.1.4458.1000.1.5.40.2	Integer	RO	Current Hub Site Synchronization operating state.
winlink1000OduAirHssSyncStatus	1.3.6.1.4.1.4458.1000.1.5.40.3	Integer	RO	Hub Site Synchronization sync status.
winlink1000OduAirHssExtPulseStatus	1.3.6.1.4.1.4458.1000.1.5.40.4	Integer	RO	Hub Site Synchronization external pulse detection status. In GSS mode: if generating then 1PSP is auto generated by the GSS Unit. if generatingAndDetecting then 1PSP is generated by GPS satellites signal.
winlink1000OduAirHssExtPulseType	1.3.6.1.4.1.4458.1000.1.5.40.5	Integer	RO	Hub Site Synchronization external pulse type.
winlink1000OduAirHssDesiredExtPulseType	1.3.6.1.4.1.4458.1000.1.5.40.6	Integer	RW	Hub Site Synchronization required external pulse type. Valid values for read write: {typeA(2) typeB(3) typeC(4) typeD(5) typeE(6) typeF(7)}. Valid value for read only: {notApplicable(1)}.
winlink1000OduAirHssRfpIndex	1.3.6.1.4.1.4458.1000.1.5.40.7.1.1	Integer	RO	ODU RFP Table index. The index represent the Radio Frame Pattern: typeA(2) typeB(3) typeC(4) typeD(5) typeE(6) typeF(7).
winlink1000OduAirHssRfpEthChannelBW80MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.10	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 80MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW7MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.11	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 7MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW14MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.12	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 14MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW5MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.2	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 5MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW10MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.4	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 10MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpEthChannelBW20MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.6	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 20MHz in the specific Radio Frame Pattern.

Table 4-3: Private MIB Parameters - HSU (Sheet 7 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirHssRfpEthChannelBW40MHz	1.3.6.1.4.1.4458.1000.1.5.40.7.1.8	Integer	RO	Represents the compatibility of Ethernet service under Channel BW of 40MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpStr	1.3.6.1.4.1.4458.1000.1.5.40.8	DisplayString	RO	Hub Site Synchronization supported patterns
winlink1000OduAirHssHsmID	1.3.6.1.4.1.4458.1000.1.5.40.9	Integer	RO	A unique ID which is common to the HSM and all its collocated ODUs
winlink1000OduAirLockRemote	1.3.6.1.4.1.4458.1000.1.5.41	Integer	RW	This parameter enables locking the link with a specific ODU. The following values can be set: Unlock (default) - The ODU is not locked on a specific remote ODU. Unlock can only be performed when the link is not connected. Lock - The ODU is locked on a specific remote ODU. Lock can only be performed when the link is active.
winlink1000OduAirAntennaGain	1.3.6.1.4.1.4458.1000.1.5.42	Integer	RW	Current Antenna Gain in 0.1 dBi resolution. User defined value for external antenna. Legal range: MinAntennaGain<AntennaGain<MaxAntennaGain.
winlink1000OduAirFeederLoss	1.3.6.1.4.1.4458.1000.1.5.43	Integer	RW	Current Feeder Loss in 0.1 dBm resolution. User defined value for external antenna.
winlink1000OduAirMaxAntennaGain	1.3.6.1.4.1.4458.1000.1.5.44	Integer	RO	Maximum allowed Antenna Gain in 0.1 dBi resolution.
winlink1000OduAirMinAntennaGain	1.3.6.1.4.1.4458.1000.1.5.45	Integer	RO	Minimum allowed Antenna Gain in 0.1 dBi resolution.
winlink1000OduAirMaxEIRP	1.3.6.1.4.1.4458.1000.1.5.46	Integer	RO	Maximum EIRP value as defined by regulation in 0.1 dBm resolution.
winlink1000OduAirAntennaGainConfigSupport	1.3.6.1.4.1.4458.1000.1.5.47	Integer	RO	Antenna Gain Configurability options are product specific: supported not supported.
winlink1000OduAirAntennaType	1.3.6.1.4.1.4458.1000.1.5.48	Integer	RW	External Antenna Type: Monopolar or Bipolar.
winlink1000OduAirRssBalance	1.3.6.1.4.1.4458.1000.1.5.49	Integer	RO	RSS balance. Relation between RSS in radio 1 and RSS in radio 2. -2 : Radio 2 RSS is much stronger than Radio 1 RSS. -1 : Radio 2 RSS is stronger than Radio 1 RSS. -0 : Radio 2 RSS is equal to Radio 1 RSS. 1 : Radio 1 RSS is stronger than Radio 2 RSS. 2 : Radio 1 RSS is much stronger than Radio 2 RSS.
winlink1000OduAirSesState	1.3.6.1.4.1.4458.1000.1.5.5	Integer	RO	Current Link State. The value is active (3) during normal operation.
winlink1000OduAirTotalTxPower	1.3.6.1.4.1.4458.1000.1.5.50	Integer	RO	Total Transmit Power in dBm. This is a nominal value While the actual transmit power includes additional attenuation.
winlink1000OduAirInstallFreqAndCBW	1.3.6.1.4.1.4458.1000.1.5.51	DisplayString	RW	Installation frequency Channel BW. Relevant in point to point systems.
winlink1000OduAirDFSType	1.3.6.1.4.1.4458.1000.1.5.52	Integer	RO	DFS regulation type.
winlink1000OduAirComboSubBandIndex	1.3.6.1.4.1.4458.1000.1.5.53.1.1.1	Integer	RO	ODU Multi-band sub bands table index.
winlink1000OduAirComboSubBandChannelBW20AdminState	1.3.6.1.4.1.4458.1000.1.5.53.1.1.10	DisplayString	RO	Reflects the CBW 20MHz admin state vector.
winlink1000OduAirComboSubBandChannelBW40AdminState	1.3.6.1.4.1.4458.1000.1.5.53.1.1.11	DisplayString	RO	Reflects the CBW 40MHz admin state vector.
winlink1000OduAirComboSubBandAllowableChannels	1.3.6.1.4.1.4458.1000.1.5.53.1.1.12	DisplayString	RO	Reflects the allowable channels vector.
winlink1000OduAirComboSubBandChannelBWAvail	1.3.6.1.4.1.4458.1000.1.5.53.1.1.13	DisplayString	RO	Reflects the available CBWs vector.
winlink1000OduAirComboSubBandChannelBandwidth	1.3.6.1.4.1.4458.1000.1.5.53.1.1.14	Integer	RO	Reflects the sub-band default channel bandwidth.

Table 4-3: Private MIB Parameters - HSU (Sheet 8 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirCom boSubBandMinFreq	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.15	Integer	RO	Reflects the sub-band default minimal frequency.
winlink1000OduAirCom boSubBandMaxFreq	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.16	Integer	RO	Reflects the sub-band default maximal frequency.
winlink1000OduAirCom boSubBandFrequencyRe solution	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.17	Integer	RO	Reflects the sub-band frequency resolution.
winlink1000OduAirCom boSubBandDefaultChan nelList	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.18	DisplayString	RO	Reflects the default channel list vector.
winlink1000OduAirCom boSubBandDfsState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.19	Integer	RO	Reflects the sub-band DFS state.
winlink1000OduAirCom boSubBandId	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.2	DisplayString	RO	Represents the Multi-band sub band ID.
winlink1000OduAirCom boSubBandChannelBW8 0AdminState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.20	DisplayString	RO	Reflects the CBW 80MHz admin state vector.
winlink1000OduAirCom boSubBandChannelBW7 AdminState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.21	DisplayString	RO	Reflects the CBW 7MHz admin state vector.
winlink1000OduAirCom boSubBandChannelBW1 4AdminState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.22	DisplayString	RO	Reflects the CBW 80MHz admin state vector.
winlink1000OduAirCom boSubBandDescription	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.3	DisplayString	RO	Multi-band sub band description.
winlink1000OduAirCom boSubBandInstallFreq	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.4	Integer	RO	Represents the Multi-band sub band installation frequency in KHz.
winlink1000OduAirCom boSubBandAdminState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.5	Integer	RO	Represents the Multi-band sub band administrative state.
winlink1000OduAirCom boSubBandInstallationAl lowed	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.6	Integer	RO	Reflects if the Multi-band sub band allows installtion.
winlink1000OduAirCom boFrequencyBandId	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.7	Integer	RO	Reflects the frequency band id.
winlink1000OduAirCom boSubBandChannelBW5 AdminState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.8	DisplayString	RO	Reflects the CBW 5MHz admin state vector.
winlink1000OduAirCom boSubBandChannelBW1 0AdminState	1.3.6.1.4.1.4458.1000 .1.5.53.1.1.9	DisplayString	RO	Reflects the CBW 10MHz admin state vector.
winlink1000OduAirCom boNumberOfSubBands	1.3.6.1.4.1.4458.1000 .1.5.53.2	Integer	RO	Represents the number of Multi-band sub bands.
winlink1000OduAirCom boSwitchSubBand	1.3.6.1.4.1.4458.1000 .1.5.53.3	DisplayString	RW	Switch sub band operation with a given sub band ID. The get operation retrieves the current sub band ID.
winlink1000OduAirCom boCurrentSubBandDesc	1.3.6.1.4.1.4458.1000 .1.5.53.4	DisplayString	RO	Current Sub Band description.
winlink1000OduAirCom boCurrentFrequencyBan dId	1.3.6.1.4.1.4458.1000 .1.5.53.5	Integer	RO	Current Frequency Band Id Number.
winlink1000OduAirInter nalMaxRate	1.3.6.1.4.1.4458.1000 .1.5.54	Integer	RO	Max Ethernet throughput of the site (in Kpbs).
winlink1000OduAirSpect rumAnalysisOperState	1.3.6.1.4.1.4458.1000 .1.5.56.1	Integer	RW	Spectrum Analysis operation state. The configurable values are Spectrum Analysis Stop Start and Restart. Not Supported value indicates that the feature is not supported on the device. Not Supported is not a configurable state.
winlink1000OduAirRxPo werAntennaA	1.3.6.1.4.1.4458.1000 .1.5.56.2	Integer	RO	Received Signal Strength in dBm of Antenna A.

Table 4-3: Private MIB Parameters - HSU (Sheet 9 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirRxPowerAntennaB	1.3.6.1.4.1.4458.1000.1.5.56.3	Integer	RO	Received Signal Strength in dBm of Antenna B.
winlink1000OduAirNumberOfSpectrumChannels	1.3.6.1.4.1.4458.1000.1.5.56.4	Integer	RO	Represents the number of Spectrum Channels.
winlink1000OduAirSpectrumChannelIndex	1.3.6.1.4.1.4458.1000.1.5.56.5.1.1	Integer	RO	ODU Spectrum Channel index.
winlink1000OduAirSpectrumChannelMaxNFAntennaB	1.3.6.1.4.1.4458.1000.1.5.56.5.1.10	Integer	RO	Max normalized Noise Floor value in dBm - of Antenna B - over all dwells.
winlink1000OduAirSpectrumChannelCACPerformed	1.3.6.1.4.1.4458.1000.1.5.56.5.1.11	Integer	RO	read-only
winlink1000OduAirSpectrumChannelLastCACTimestamp	1.3.6.1.4.1.4458.1000.1.5.56.5.1.12	TimeTicks	RO	Last CAC performed timestamp in hundredths of a second since device up time. If no CAC has performed on the channel the return value will be 0.
winlink1000OduAirSpectrumChannelRadarDetected	1.3.6.1.4.1.4458.1000.1.5.56.5.1.13	Integer	RO	read-only
winlink1000OduAirSpectrumChannelRadarDetectionTimestamp	1.3.6.1.4.1.4458.1000.1.5.56.5.1.14	TimeTicks	RO	Last Radar Detection timestamp in hundredths of a second since device up time. If no Radar has detected on the channel the return value will be 0.
winlink1000OduAirSpectrumChannelAvailable	1.3.6.1.4.1.4458.1000.1.5.56.5.1.15	Integer	RO	read-only
winlink1000OduAirSpectrumChannelMaxBeaconRss	1.3.6.1.4.1.4458.1000.1.5.56.5.1.16	Integer	RO	The max RSS value of a received beacon on the specific channel in dBm.
winlink1000OduAirSpectrumChannelCompressed	1.3.6.1.4.1.4458.1000.1.5.56.5.1.17	OctetString	RO	Compress all the Spectrum data per channel into one variable. Frequency (4 bytes) Scanned (1 byte) Timestamp (4 bytes) Last NF Antenna A (1 byte) Last NF Antenna B (1 byte) Avg NF Antenna A (1 byte) Avg NF Antenna B (1 byte) Max NF Antenna A (1 byte) Max NF Antenna B (1 byte) CAC Performed (1 byte) Last CAC Timestamp (4 bytes) Radar Detected (1 byte) Radar Detected Timestamp (4 bytes) Channel Available (1 byte) Max Beacon RSS (1 byte).
winlink1000OduAirSpectrumChannelFrequency	1.3.6.1.4.1.4458.1000.1.5.56.5.1.2	Integer	RO	ODU Spectrum Channel frequency in MHz.
winlink1000OduAirSpectrumChannelScanned	1.3.6.1.4.1.4458.1000.1.5.56.5.1.3	Integer	RO	read-only
winlink1000OduAirSpectrumChannelScanningTimestamp	1.3.6.1.4.1.4458.1000.1.5.56.5.1.4	TimeTicks	RO	Channel last scan timestamp in hundredths of a second since device up time. If the channel was not scanned than the return value will be 0.
winlink1000OduAirSpectrumChannelLastNFAntennaA	1.3.6.1.4.1.4458.1000.1.5.56.5.1.5	Integer	RO	Normalized Noise Floor value in dBm - of Antenna A - (including 2 neighbor frequencies).
winlink1000OduAirSpectrumChannelLastNFAntennaB	1.3.6.1.4.1.4458.1000.1.5.56.5.1.6	Integer	RO	Normalized Noise Floor value in dBm - of Antenna B - (including 2 neighbor frequencies).
winlink1000OduAirSpectrumChannelAverageNFAntennaA	1.3.6.1.4.1.4458.1000.1.5.56.5.1.7	Integer	RO	Average normalized Noise Floor value in dBm - of Antenna A - over all dwells.
winlink1000OduAirSpectrumChannelAverageNFAntennaB	1.3.6.1.4.1.4458.1000.1.5.56.5.1.8	Integer	RO	Average normalized Noise Floor value in dBm - of Antenna B - over all dwells.
winlink1000OduAirSpectrumChannelMaxNFAntennaA	1.3.6.1.4.1.4458.1000.1.5.56.5.1.9	Integer	RO	Max normalized Noise Floor value in dBm - of Antenna A - over all dwells.
winlink1000OduAirChipMinMaxFreq	1.3.6.1.4.1.4458.1000.1.5.56.6	DisplayString	RO	The minimum and maximum frequencies in MHz which the chip supports.



Table 4-3: Private MIB Parameters - HSU (Sheet 10 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirAntConfAndRatesStatus	1.3.6.1.4.1.4458.1000.1.5.57	Integer	RO	Description: Antenna configuration and Rates status (1 = Single antenna with single data stream 2 = Dual antenna with single data stream 3 = Dual antenna with dual data stream).
winlink1000OduAirDualAntTxMode	1.3.6.1.4.1.4458.1000.1.5.58	Integer	RW	Description: Transmission type when using Dual radios (MIMO or AdvancedDiversity using one stream of data).
winlink1000OduAirTxOperationMode	1.3.6.1.4.1.4458.1000.1.5.59	Integer	RW	This parameter controls the Operation mode of frames sent over the air. The Operation mode is either normal (1) for regular transmission where frame size is determined by the traffic or throughput test (2) when the user requests an actual over the air throughput estimation using full frames. The latter lasts no more than a predetermined interval (default 30 sec).
winlink1000OduAirMstrSlv	1.3.6.1.4.1.4458.1000.1.5.6	Integer	RO	This parameter indicates if the device was automatically selected into the radio link master or slave. The value is undefined if there is no link. The value is relevant only for point to point systems.
winlink1000OduAirAccumulatedUAS	1.3.6.1.4.1.4458.1000.1.5.61	Integer	RO	Accumulates the Unavailable seconds of the Air Interface. Relevant for point to point systems.
winlink1000OduAirDistStr	1.3.6.1.4.1.4458.1000.1.5.62	DisplayString	RO	Possibilities of the link according to RFP and CBW
winlink1000OduAirChannelsDefaultFreqStr	1.3.6.1.4.1.4458.1000.1.5.63	DisplayString	RO	A string representing the channels available. Each character represents one frequency when '1' means its available and '0' means its not.
winlink1000OduAirAntConnectionType	1.3.6.1.4.1.4458.1000.1.5.64	Integer	RW	Antenna connection type (External(1) Integrated(2) Embedded_External(3) Embedded_Integrated(4) Integrated_BSA(5)).
winlink1000OduAirAllowableChannelsStr	1.3.6.1.4.1.4458.1000.1.5.65	DisplayString	RW	A string representing the allowable channels. Each character represents one channel when '1' means its available and '0' means its not.
winlink1000OduAirDfsAlgorithmTypeState	1.3.6.1.4.1.4458.1000.1.5.66.1	Integer	RW	Bitmap for state of Radar Algorithm Type. Filters by bit's position: 0 = Zero PW 1 = Fixed 2 = Variable 3 = Staggered 4 = Long.
winlink1000OduAirDfsLastDetectedIndex	1.3.6.1.4.1.4458.1000.1.5.66.2.1.1	Integer	RO	Dfs Last Detected Radars Table Index.
winlink1000OduAirDfsLastDetectedTime	1.3.6.1.4.1.4458.1000.1.5.66.2.1.2	TimeTicks	RO	Dfs time of the last detected radar.
winlink1000OduAirDfsLastDetectedAlgorithmType	1.3.6.1.4.1.4458.1000.1.5.66.2.1.3	Integer	RO	Dfs type of the last detected radar.
winlink1000OduAirDfsLastDetectedFrequency	1.3.6.1.4.1.4458.1000.1.5.66.2.1.4	Integer	RO	Dfs frequency of the last detected radar.
winlink1000OduAirGeolocation	1.3.6.1.4.1.4458.1000.1.5.69	DisplayString	RW	Geographic device location in format: latitude longitude.
winlink1000OduAirAggregateCapacity	1.3.6.1.4.1.4458.1000.1.5.70	Integer	RO	Aggregate Capacity of the ODU in Mbps.
winlink1000OduAirCurrentManualAngle	1.3.6.1.4.1.4458.1000.1.5.72	Integer	RO	Absolute (manual) angle (Deg.) of the unit.
winlink1000OduAirCurrentManualElevAngle	1.3.6.1.4.1.4458.1000.1.5.73	Integer	RO	Absolute Elevation angle (Deg.) of the unit.
winlink1000OduAirAntennaTemperatureC	1.3.6.1.4.1.4458.1000.1.5.74	Integer	RO	Antenna Temperature (C)
winlink1000OduAirResync	1.3.6.1.4.1.4458.1000.1.5.8	Integer	RW	Setting this parameter to 1 will cause the link to restart the synchronization process.
winlink1000OduAirRxPower	1.3.6.1.4.1.4458.1000.1.5.9.1	Integer	RO	Received Signal Strength in dBm. Relevant only for point to point systems.

Table 4-3: Private MIB Parameters - HSU (Sheet 11 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirTotalFrames	1.3.6.1.4.1.4458.1000.1.5.9.2	Counter	RO	Total number of radio frames.
winlink1000OduAirBadFrames	1.3.6.1.4.1.4458.1000.1.5.9.3	Counter	RO	Total number of received radio frames with CRC error. The value is relevant only for point to point systems .
winlink1000OduAirCurrentRate	1.3.6.1.4.1.4458.1000.1.5.9.4	Integer	RO	Deprecated parameter. Actual rate of the air interface in Mbps. For Channel Bandwidth of 20 10 5 MHz divide the value by 1 2 4 respectively.
winlink1000OduAirCurrentRateIdx	1.3.6.1.4.1.4458.1000.1.5.9.5	Integer	RO	Index of current air rate.
winlink1000OduAirChainsRxPower	1.3.6.1.4.1.4458.1000.1.5.9.6	OctetString	RO	Received Signal Strength of Cpe chains in dBm. Chain 1 RSS: (1 Byte) Chain 2 RSS: (1 Byte) Chain 3 RSS: (1 Byte)
winlink1000OduAirCurrentRateCBW	1.3.6.1.4.1.4458.1000.1.5.9.7	Integer	RO	CBW of current air rate.
winlink1000OduAirCurrentRateGI	1.3.6.1.4.1.4458.1000.1.5.9.8	Integer	RO	GI of current air rate.
winlink1000OduPerfMonCurrUAS	1.3.6.1.4.1.4458.1000.1.6.1.1.1	Gauge	RO	The current number of Unavailable Seconds starting from the present 15 minutes period.
winlink1000OduPerfMonCurrES	1.3.6.1.4.1.4458.1000.1.6.1.1.2	Gauge	RO	Current number of Errored Seconds starting from the present 15 minutes period.
winlink1000OduPerfMonCurrSES	1.3.6.1.4.1.4458.1000.1.6.1.1.3	Gauge	RO	Current number of Severely Errored Seconds starting from the present 15 minutes period.
winlink1000OduPerfMonCurrBBE	1.3.6.1.4.1.4458.1000.1.6.1.1.4	Gauge	RO	Current number of Background Block Errors starting from the present 15 minutes period.
winlink1000OduPerfMonCurrIntegrity	1.3.6.1.4.1.4458.1000.1.6.1.1.5	Integer	RO	Indicates the integrity of the entry.
winlink1000OduPerfMonCurrCompressed	1.3.6.1.4.1.4458.1000.1.6.1.1.6	OctetString	RO	Holds a compressed string of all data per interface. Compressed Air Interface Structure (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) MinRSL (1) MaxRSL (1) RSLThresh1Exceeded (4) RSLThresh2Exceeded (4) MinTSL (1) MaxTSL (1) TSLThresh1Exceed (4) BBERThresh1Exceed (4) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) Compressed Ethernet ODU interface (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) ActiveSeconds (4)
winlink1000OduPerfMonTdmCurrActiveSeconds	1.3.6.1.4.1.4458.1000.1.6.10.1.1	Gauge	RO	Parameter indicating whether the TDM service was active. Under TDM backup link the parameter indicates whether the backup link was active.
winlink1000OduPerfMonTxThresh1	1.3.6.1.4.1.4458.1000.1.6.20	Integer	RW	When the Transmit power exceeds this threshold a performance monitoring TSL1 counter is incremented.
winlink1000OduPerfMonRxThresh1	1.3.6.1.4.1.4458.1000.1.6.21	Integer	RW	When the RX power exceeds this threshold a performance monitoring RSL1 counter is incremented.
winlink1000OduPerfMonRxThresh2	1.3.6.1.4.1.4458.1000.1.6.22	Integer	RW	When the RX power exceeds this threshold a performance monitoring RSL2 counter is incremented.
winlink1000OduPerfMonBBERThresh1	1.3.6.1.4.1.4458.1000.1.6.23	Integer	RW	When the BBER exceeds this threshold a performance monitoring BBER counter is incremented. The units are 1/10 of a percent.
winlink1000OduPerfMonEthCapacityThreshKbps	1.3.6.1.4.1.4458.1000.1.6.24	Integer	RW	When the current throughput is below this threshold the corresponding counter is incremented
winlink1000OduPerfMonHighTrafficThreshKbps	1.3.6.1.4.1.4458.1000.1.6.25	Integer	RW	When the current traffic is above this threshold then corresponding counter is incremented.
winlink1000OduPerfMonAirCurrMinRSL	1.3.6.1.4.1.4458.1000.1.6.4.1.1	Integer	RO	Current Min Received Level Reference starting from the present 15 minutes period.
winlink1000OduPerfMonAirCurrMaxRSL	1.3.6.1.4.1.4458.1000.1.6.4.1.2	Integer	RO	Current Max Received Level Reference starting from the present 15 minutes period.

Table 4-3: Private MIB Parameters - HSU (Sheet 12 of 37)

Name	OID	Type	Access	Description
winlink1000OduPerfMonAirCurrRSLThresh1Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.3	Gauge	RO	Number of seconds Receive Signal Level exceeded the RSL1 threshold in the last 15 minutes.
winlink1000OduPerfMonAirCurrRSLThresh2Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.4	Gauge	RO	Number of seconds Receive Signal Level exceeded the RSL2 threshold in the last 15 minutes.
winlink1000OduPerfMonAirCurrMinTSL	1.3.6.1.4.1.4458.1000.1.6.4.1.5	Integer	RO	Current Min Transmit Signal Level starting from the present 15 minutes period.
winlink1000OduPerfMonAirCurrMaxTSL	1.3.6.1.4.1.4458.1000.1.6.4.1.6	Integer	RO	Current Max Transmit Signal Level starting from the present 15 minutes period.
winlink1000OduPerfMonAirCurrTSLThresh1Exceeded	1.3.6.1.4.1.4458.1000.1.6.4.1.7	Gauge	RO	Number of seconds Transmit Signal Level exceeded the TSL1 threshold in the last 15 minutes.
winlink1000OduPerfMonAirCurrBBERThresh1Exceed	1.3.6.1.4.1.4458.1000.1.6.4.1.8	Gauge	RO	Number of seconds Background Block Error Ratio exceeded the BBER1 threshold in the last 15 minutes.
winlink1000OduPerfMonEthCurrRxMBytes	1.3.6.1.4.1.4458.1000.1.6.7.1.1	Gauge	RO	Current RX Mega Bytes starting from the present 15 minutes period.
winlink1000OduPerfMonEthCurrTxMBytes	1.3.6.1.4.1.4458.1000.1.6.7.1.2	Gauge	RO	Current Transmit Mega Bytes starting from the present 15 minutes period.
winlink1000OduPerfMonEthCurrEthCapacityThresholdUnder	1.3.6.1.4.1.4458.1000.1.6.7.1.3	Gauge	RO	The number of times throughput was below threshold in the present 15 minutes period. Relevant for point to point systems.
winlink1000OduPerfMonEthCurrHighTrafficThresholdExceed	1.3.6.1.4.1.4458.1000.1.6.7.1.4	Gauge	RO	The number of times actual traffic was above threshold in the present 15 minutes period.
winlink1000OduPerfMonEthCurrActiveSeconds	1.3.6.1.4.1.4458.1000.1.6.7.1.5	Gauge	RO	The number of seconds in which RPL Ethernet swservice was not blocked in the present 15 minutes period.
winlink1000OduAgnGenAddTrapExt	1.3.6.1.4.1.4458.1000.1.7.1.1	Integer	RW	If 'yes' is chosen the ifIndex Unit Severity Time_T and Alarm Id from the winlink1000OduAgnCurrAlarmTable will be bind to the end of each private trap.
winlink1000OduAgnGenSetMode	1.3.6.1.4.1.4458.1000.1.7.1.2	Integer	RW	This parameter is reserved to the element manager provided with the product.
winlink1000OduAgnNTPCfgTimeServerIP	1.3.6.1.4.1.4458.1000.1.7.2.1	IPAddress	RW	IP address of the server from which the current time is loaded.
winlink1000OduAgnNTPCfgTimeOffsetFromUTC	1.3.6.1.4.1.4458.1000.1.7.2.2	Integer	RW	Offset from Coordinated Universal Time (minutes). Possible values: -1440..1440.
winlink1000OduAgnRealTimeAndDate	1.3.6.1.4.1.4458.1000.1.7.2.3	OctetString	RW	This parameter specifies the real time and date Format 'YYYY-MM-DD HH:MM:SS' (Hexadecimal). A date-time specification: field octets contents range - ----- ----- 1 1-2 year 0..65536 2 3 month 1..12 3 4 day 1..31 4 5 hour 0..23 5 6 minutes 0..59 6 7 seconds 0..60 (use 60 for leap-second) 7 8 deci- seconds 0..9 For example Tuesday May 26 1992 at 1:30:15 PM EDT would be displayed as: 07 c8 05 1a 0d 1e 0f 00 ( 1992 -5 -26 13:30:15 )
winlink1000OduAdmNTPCfgTimeServerIPv6	1.3.6.1.4.1.4458.1000.1.7.2.4	DisplayString	RW	IPv6 address of the server from which the current time is loaded.
winlink1000OduAgnCurrAlarmLastChange	1.3.6.1.4.1.4458.1000.1.7.3.1	Integer	RO	This counter is initialized to 0 after a device reset and is incremented upon each change in the winlink1000OduAgnCurrAlarmTable (either an addition or removal of an entry).
winlink1000OduAgnCurrAlarmCounter	1.3.6.1.4.1.4458.1000.1.7.3.2.1.1	Integer	RO	A running counter of active alarms. The counter is incremented for every new RAISED trap. It is cleared after a device reset.

Table 4-3: Private MIB Parameters - HSU (Sheet 13 of 37)

Name	OID	Type	Access	Description
winlink1000OduAgnCurrAlarmSeverity	1.3.6.1.4.1.4458.1000.1.7.3.2.1.2	Integer	RO	Current Alarm severity.
winlink1000OduAgnCurrAlarmId	1.3.6.1.4.1.4458.1000.1.7.3.2.1.3	Integer	RO	Unique Alarm Identifier (combines alarm type and interface). The same AlarmId is used for RAISED and CLEARED alarms.
winlink1000OduAgnCurrAlarmIfIndex	1.3.6.1.4.1.4458.1000.1.7.3.2.1.4	Integer	RO	Interface Index where the alarm occurred. Alarms that are not associated with a specific interface will have the following value: 65535.
winlink1000OduAgnCurrAlarmUnit	1.3.6.1.4.1.4458.1000.1.7.3.2.1.5	Integer	RO	Unit associated with the alarm.
winlink1000OduAgnCurrAlarmTrapID	1.3.6.1.4.1.4458.1000.1.7.3.2.1.6	Integer	RO	ID of the raised trap that was sent when this alarm was raised.
winlink1000OduAgnCurrAlarmTimeT	1.3.6.1.4.1.4458.1000.1.7.3.2.1.7	Integer	RO	Timestamp of this alarm. This number is in seconds from Midnight January 1st 1970.
winlink1000OduAgnCurrAlarmText	1.3.6.1.4.1.4458.1000.1.7.3.2.1.8	DisplayString	RO	Alarm display text (same as the text in the sent trap).
winlink1000OduAgnLastEventsNumber	1.3.6.1.4.1.4458.1000.1.7.4.1	Integer	RO	This counter indicates the size of the winlink1000OduAgnLastEventsTable
winlink1000OduAgnLastEventsIndex	1.3.6.1.4.1.4458.1000.1.7.4.2.1.1	Integer	RO	The index of the table
winlink1000OduAgnLastEventsSeverity	1.3.6.1.4.1.4458.1000.1.7.4.2.1.2	Integer	RO	Current Trap severity.
winlink1000OduAgnLastEventsIfIndex	1.3.6.1.4.1.4458.1000.1.7.4.2.1.3	Integer	RO	Interface Index where the event occurred. Traps that are not associated with a specific interface will have the following value: 65535.
winlink1000OduAgnLastEventsTimeT	1.3.6.1.4.1.4458.1000.1.7.4.2.1.4	Integer	RO	Timestamp of this trap. This number is in seconds from Midnight January 1st 1970.
winlink1000OduAgnLastEventsText	1.3.6.1.4.1.4458.1000.1.7.4.2.1.5	DisplayString	RO	Trap display text (same as the text in the sent trap).
winlink1000OduAgnUsersIndex	1.3.6.1.4.1.4458.1000.1.7.5.1.1	Integer	RO	SNMP users table index.
winlink1000OduAgnUsersUserName	1.3.6.1.4.1.4458.1000.1.7.5.1.2	DisplayString	RW	SNMP users user names.
winlink1000OduAgnUsersPassword	1.3.6.1.4.1.4458.1000.1.7.5.1.3	DisplayString	RW	SNMP users passwords.
winlink1000OduAgnUsersProfile	1.3.6.1.4.1.4458.1000.1.7.5.1.4	Integer	RW	SNMP users profile (1=Disabled 2=ReadOnly 3=ReadWrite).
winlink1000OduAgnUsersLastAccessTime	1.3.6.1.4.1.4458.1000.1.7.5.1.5	Integer	RO	SNMP users last access time.
winlink1000HsuAirState	1.3.6.1.4.1.4458.1000.4.1.1	Integer	RO	Holds the state of the HSU.
winlink1000HsuAirCompressedMon	1.3.6.1.4.1.4458.1000.4.1.10	OctetString	RO	Holds HSU monitor data in compressed format: HSU Rx Rate in Kbps (4) HSU Tx Rate in Kbps (4) HSU Rx Rate in Fps (4) HSU Tx Rate in Fps (4) HSU LAN 1 Rx Rate in Kbps (4) HSU LAN 1 Tx Rate in Kbps (4) HSU LAN 1 Rx Rate in Fps (4) HSU LAN 1 Tx Rate in Fps (4) HSU LAN 2 Rx Rate in Kbps (4) HSU LAN 2 Tx Rate in Kbps (4) HSU LAN 2 Rx Rate in Fps (4) HSU LAN 2 Tx Rate in Fps (4) 1588TC Performance (1) SyncE Performance (1) ATPC status (1) Installation confirmation required (1)
winlink1000HsuAirLinkState	1.3.6.1.4.1.4458.1000.4.1.2	Integer	RO	Holds the state of the HSU link.
winlink1000HsuAirHsuld	1.3.6.1.4.1.4458.1000.4.1.3	Integer	RO	Holds the HSU ID as sent by the HBS.
winlink1000HsuAirLocalDeregister	1.3.6.1.4.1.4458.1000.4.1.5	Integer	RW	Performs Local HSU Deregistration when - only when the link is off.

Table 4-3: Private MIB Parameters - HSU (Sheet 14 of 37)

Name	OID	Type	Access	Description
winlink1000HsuAirRemoteCompressedMon	1.3.6.1.4.1.4458.1000.4.1.6	OctetString	RO	Holds all the configuration data of The HBS in compressed format. Fields Included: Rss (1 byte) Rss Balance (1 byte) Est. Tput (4 bytes) In Bytes of the whole sector (4 bytes) Out Bytes of the whole sector (4 bytes) In Frames of the whole sector (4 bytes) Out Frames of the whole sector (4 bytes) Max Throughput DownLink (4 bytes) Max Throughput UpLink (4 bytes) Rx Rate In Kbps of the whole sector (4 bytes) Tx Rate In Kbps of the whole sector (4 bytes) Rx Rate In Fps of the whole sector (4 bytes) Tx Rate In Fps of the whole sector (4 bytes) Peak Throughput in the DL direction in Kbps (4 bytes) Peak Throughput in the UL direction in Kbps (4 bytes) Tx Ratio (2 bytes) Chain 1 Rss (1 byte) Chain 2 Rss (1 byte) Chain 3 Rss (1 byte) HBS Current Rate Index (2 bytes) HBS Current Rate CBW (1 bytes) HBS Current Rate GI (1 bytes) Rx LAN 1 Rate In Kbps of the whole sector (4 bytes) Tx LAN 1 Rate In Kbps of the whole sector (4 bytes) Rx LAN 1 Rate In Fps of the whole sector (4 bytes) Tx LAN 1 Rate In Fps of the whole sector (4 bytes) Rx LAN 2 Rate In Kbps of the whole sector (4 bytes) Tx LAN 2 Rate In Kbps of the whole sector (4 bytes) Rx LAN 2 Rate In Fps of the whole sector (4 bytes) Tx LAN 2 Rate In Fps of the whole sector (4 bytes) SyncE Performance (1 byte) HBS EC Changes Counter (1 byte)
winlink1000HsuAirRemoteCompressedStatic	1.3.6.1.4.1.4458.1000.4.1.7	DisplayString	RO	Holds all the configuration data of the HBS in a compressed format. Helps the NMS to get info regarding new Unregistered links. Fields Included: Location (32 bytes) IP address (8 bytes in hexa) Subnet mask (8 bytes in hexa) HBS Antenna type (1 byte) HBS Agent Version (4 bytes) HBS Name (32 bytes)
winlink1000HsuAirRssThresholdSync	1.3.6.1.4.1.4458.1000.4.1.8	Integer	RW	HSUs will be synchornized immediately if RSS is better than threshold.
winlink1000HsuAirAlignmentCmd	1.3.6.1.4.1.4458.1000.4.1.9.1	Integer	RW	1 Start Alignment process and initialize the GIRO 2 Evaluate current manual angle 3 Finish Alignment process 4 Abort Alignment process 5 Evaluate best manual angle 6 Stop Alignment process
winlink1000HsuAirAlignmentStatus	1.3.6.1.4.1.4458.1000.4.1.9.2	Integer	RO	Antenna Alignment status: -1 N/A (for non BSA products) 1 ISS (scanning for HBS) 2 CSA (Sync to HBS waiting for Evaluation command) 3 Bi-directional link 4 Evaluate 2x2 5 Evaluate 3x3 6 Alignment Finished.
winlink1000HsuAirAlignment3x3Step	1.3.6.1.4.1.4458.1000.4.1.9.3	Integer	RO	Step number out of total steps in Throughput evaluation for 3x3 scenario.
winlink1000HsuAirAlignment3x3TotalSteps	1.3.6.1.4.1.4458.1000.4.1.9.4	Integer	RO	Total steps in Throughput evaluation for 3x3 scenario.
winlink1000HsuAirAlignmentEvalTo	1.3.6.1.4.1.4458.1000.4.1.9.5	Integer	RW	Evaluation timeout.
winlink1000HsuAirAlignmentLastReportManualAngle	1.3.6.1.4.1.4458.1000.4.1.9.6.1	Integer	RO	The angle of the antenna. Used in the alignment process.
winlink1000HsuAirAlignmentLastReportTputUpSector	1.3.6.1.4.1.4458.1000.4.1.9.6.2	Integer	RO	Expected throughput for the whole sector in the Uplink direction in this angle.
winlink1000HsuAirAlignmentLastReportTputDownSector	1.3.6.1.4.1.4458.1000.4.1.9.6.3	Integer	RO	Expected throughput for the whole sector in the Downlink direction in this angle.
winlink1000HsuAirAlignmentLastReportMcsIndexUp	1.3.6.1.4.1.4458.1000.4.1.9.6.4	Integer	RO	MCS index of the link in the uplink direction.
winlink1000HsuAirAlignmentLastReportMcsIndexDown	1.3.6.1.4.1.4458.1000.4.1.9.6.5	Integer	RO	MCS index of the link in the downlink direction.



Table 4-3: Private MIB Parameters - HSU (Sheet 15 of 37)

Name	OID	Type	Access	Description
winlink1000HsuAirAlign mentLastReportState	1.3.6.1.4.1.4458.1000 .4.1.9.6.6	Integer	RO	State of the Evaluation 1 Finished successfully 2 Partial Evaluation (Timeout Exceeded) 3 Evaluation Aborted (Timeout Exceeded) 4 Evaluation aborted (Unstable Antenna) 5 Evaluation aborted (Sync Lost) 6 Evaluation aborted (External command) 7 Evaluating.
winlink1000HsuAirAlign mentLastReportElectron icAnglesHsu	1.3.6.1.4.1.4458.1000 .4.1.9.6.7	DisplayString	RO	Electronic angles of 3 chains in the HSU side separated by comma.
winlink1000HsuAirAlign mentLastReportElectron icAnglesHbs	1.3.6.1.4.1.4458.1000 .4.1.9.6.8	DisplayString	RO	Electronic angles of 3 chains in the HBS side separated by comma.
winlink1000HsuAirAlign mentLastReportRss	1.3.6.1.4.1.4458.1000 .4.1.9.6.9	DisplayString	RO	RSS on chain 1 2 and 3 (separated by comma)
winlink1000HsuServiceC ommandStr	1.3.6.1.4.1.4458.1000 .4.2.1	DisplayString	RW	Ability to perform special command in the HSU. Format (string): Operation Param1 Param2 ...  ParamN.
winlink1000HsuServiceH suType	1.3.6.1.4.1.4458.1000 .4.2.2	Integer	RW	HSU type (1 = Fixed 2 = Stationary 3 = Mobile 4 = Transport)
winlink1000HsuServiceH suLevel	1.3.6.1.4.1.4458.1000 .4.2.3	Integer	RW	HSU level (1 .. 4)
winlink1000HsuEthernet PoESupported	1.3.6.1.4.1.4458.1000 .4.3.1.1	Integer	RO	read-only
winlink1000HsuEthernet PoETemperature	1.3.6.1.4.1.4458.1000 .4.3.1.2	Integer	RO	Holds the temperature (Celsius) of the POE component.
winlink1000HsuEthernet PoEEquConsumption	1.3.6.1.4.1.4458.1000 .4.3.1.3	Integer	RO	Holds the consumption of the connected equipment (milliampere).
winlink1000HsuEthernet PoEEquVoltage	1.3.6.1.4.1.4458.1000 .4.3.1.4	Integer	RO	Holds the voltage of the connected equipment (Volt).
winlink1000HsuAdminIn stallationConfirmationR equired	1.3.6.1.4.1.4458.1000 .4.4.1	Integer	RO	Installation Confirmation required for Radius mode. 1- true 2- false
winlink1000OduAdmHo stsTable			N/A	Trap destinations table. Each trap destination is defined by an IP address and a UDP port. Up to 10 addresses can be configured.
winlink1000OduAdmHo stsEntry			N/A	Trap destinations table entry. INDEX { winlink1000OduAdmHostsIndex }
winlink1000OduSrvRing VlanIdTable			N/A	Ring VLAN IDs table.
winlink1000OduSrvRing VlanIdEntry			N/A	VLAN ID of the internal ring messages. Valid values are 1 to 4094. Initial value is 0 meaning VLAN unaware. INDEX { winlink1000OduSrvRingVlanIdIndex }
winlink1000OduSrvQoS ConfTable			N/A	QoS configuration table.
winlink1000OduSrvQoS ConfEntry			N/A	QoS configuration table. INDEX { winlink1000OduSrvQoSConfIndex }
winlink1000OduEtherne tifTable			N/A	ODU Ethernet Interface table.
winlink1000OduEtherne tifEntry			N/A	ODU Ethernet Interface table entry. INDEX { winlink1000OduEthernetIfIndex }
winlink1000OduBridgeB asePortTable			N/A	ODU Bridge Ports table.
winlink1000OduBridgeB asePortEntry			N/A	ODU Bridge Ports table entry. INDEX { winlink1000OduBridgeBasePortIndex }
winlink1000OduBridgeT pPortTable			N/A	ODU Transparent Bridge Ports table.
winlink1000OduBridgeT pPortEntry			N/A	ODU Transparent Bridge Ports table entry. INDEX { winlink1000OduBridgeTpPortIndex }

Table 4-3: Private MIB Parameters - HSU (Sheet 16 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirChannelsTable			N/A	Table of channels used by automatic channels selection (ACS).
winlink1000OduAirChannelsEntry			N/A	ACS channels table entry. INDEX { winlink1000OduAirChannelsIndex }
winlink1000OduAirMaxTxPowerTable			N/A	Table of Maximum transmit power per air rate in dBm.
winlink1000OduAirMaxTxPowerEntry			N/A	Maximum Transmit power table entry. INDEX { winlink1000OduAirMaxTxPowerIndex }
winlink1000OduAirChannelBWTable			N/A	Channel Bandwidths table.
winlink1000OduAirChannelBWEntry			N/A	Channel Bandwidth table entry. INDEX { winlink1000OduAirChannelBWIndex }
winlink1000OduAirRatesTable			N/A	Air Rate indexes table for current channel bandwidth.
winlink1000OduAirRatesEntry			N/A	Air Rate indexes table entry. INDEX { winlink1000OduAirRatesIndex }
winlink1000OduAirHssRfpTable			N/A	ODU Radio Frame Patterns (RFP) Table.
winlink1000OduAirHssRfpEntry			N/A	ODU RFP Table entry. INDEX { winlink1000OduAirHssRfpIndex }
winlink1000OduAirHssDiscoverTable			N/A	HSS Discover Table.
winlink1000OduAirHssDiscoverEntry			N/A	ODU Discover Table entry. INDEX { winlink1000OduAirHssDiscoverIndex }
winlink1000OduAirHssAssociatedCUTable			N/A	Associated Ethernet HSS Clients Table. Relevant for Ethernet HSS Masters only.
winlink1000OduAirHssAssociatedCUTableEntry			N/A	Associated Ethernet HSS Clients Table Entry. Relevant for Ethernet HSS Masters only. INDEX { winlink1000OduAirHssAssociatedCUIndex }
winlink1000OduAirComboSubBandTable			N/A	ODU Multi-band Sub Bands Table.
winlink1000OduAirComboSubBandEntry			N/A	ODU Multi-band Sub Bands Table entry. INDEX { winlink1000OduAirComboSubBandIndex }
winlink1000OduAirSpectrumChannelTable			N/A	ODU Spectrum Analysis Channel Table.
winlink1000OduAirSpectrumChannelTableEntry			N/A	ODU Spectrum Analysis Channel Table entry. INDEX { winlink1000OduAirSpectrumChannelIndex }
winlink1000OduAirDfsLastDetectedTbl			N/A	Last detected radars table.
winlink1000OduAirDfsLastDetectedEntry			N/A	ODU Multi-band Sub Bands Table entry. INDEX { winlink1000OduAirDfsLastDetectedIndex }
winlink1000OduPerfMonCurrTable			N/A	This table defines/keeps the counters of the current 15 min interval.
winlink1000OduPerfMonCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonIntervalTable			N/A	This table defines/keeps the counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonIntervalIdx }
winlink1000OduPerfMonDayTable			N/A	This table defines/keeps the counters of the last month (in resolution of days).
winlink1000OduPerfMonDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonDayIdx }
winlink1000OduPerfMonAirCurrTable			N/A	This table defines/keeps the air counters of the current 15 min interval.

Table 4-3: Private MIB Parameters - HSU (Sheet 17 of 37)

Name	OID	Type	Access	Description
winlink1000OduPerfMonAirCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonAirIntervalTable			N/A	This table defines/keeps the air counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonAirIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonAirIntervalIdx }
winlink1000OduPerfMonAirDayTable			N/A	This table defines/keeps the air counters of the last month (in resolution of days).
winlink1000OduPerfMonAirDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonAirDayIdx }
winlink1000OduPerfMonEthCurrTable			N/A	This table defines/keeps the ethernet counters of the current 15 min interval.
winlink1000OduPerfMonEthCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonEthIntervalTable			N/A	This table defines/keeps the ethernet counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonEthIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonEthIntervalIdx }
winlink1000OduPerfMonEthDayTable			N/A	This table defines/keeps the ethernet counters of the last month (in resolution of days).
winlink1000OduPerfMonEthDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonEthDayIdx }
winlink1000OduPerfMonTdmCurrTable			N/A	This table defines/keeps the TDM counters of the current 15 min interval.
winlink1000OduPerfMonTdmCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000OduPerfMonTdmIntervalTable			N/A	This table defines/keeps the TDM counters of the last day (in resolution of 15 min intervals).
winlink1000OduPerfMonTdmIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000OduPerfMonTdmIntervalIdx }
winlink1000OduPerfMonTdmDayTable			N/A	This table defines/keeps the TDM counters of the last month (in resolution of days).
winlink1000OduPerfMonTdmDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000OduPerfMonTdmDayIdx }
winlink1000OduAgnCurrAlarmTable			N/A	This table includes the currently active alarms. When a RAISED trap is sent an alarm entry is added to the table. When a CLEAR trap is sent the entry is removed.
winlink1000OduAgnCurrAlarmEntry			N/A	Entry containing the details of a currently RAISED trap. INDEX { winlink1000OduAgnCurrAlarmCounter }
winlink1000OduAgnLastEventsTable			N/A	This table includes the last events. When a trap is sent an event entry is added to the table.
winlink1000OduAgnLastEventsEntry			N/A	Entry containing the details of last traps. INDEX { winlink1000OduAgnLastEventsIndex }
winlink1000OduAgnUsersTable			N/A	SNMP users table. Each user is defined by name password and profile.
winlink1000OduAgnUsersEntry			N/A	SNMP users table entry. INDEX { winlink1000OduAgnUsersIndex }
winlink1000OduAdmExternAlarmInTable			N/A	This is the External Alarm Inputs table.
winlink1000OduAdmExternAlarmInEntry			N/A	Entry containing the elements of a single External Alarm Input. INDEX { winlink1000OduAdmExternAlarmInIndex }
winlink1000IduSrvPossibleServicesTable			N/A	IDU Possible Services table.
winlink1000IduSrvPossibleServicesEntry			N/A	IDU Services table entry. INDEX { winlink1000IduSrvPossibleServicesIndex }

Table 4-3: Private MIB Parameters - HSU (Sheet 18 of 37)

Name	OID	Type	Access	Description
winlink1000IduSrvAvailServicesTable			N/A	ODU Possible TDM Services table.
winlink1000IduSrvAvailServicesEntry			N/A	ODU TDM Services table entry. INDEX { winlink1000IduSrvAvailServicesIndex }
winlink1000IduEthernetInterfaceTable			N/A	IDU Ethernet Interface table.
winlink1000IduEthernetInterfaceEntry			N/A	IDU Ethernet Interface table entry. INDEX { winlink1000IduEthernetInterfaceIndex }
winlink1000IduTdmConfigTable			N/A	IDU TDM Links Configuration table.
winlink1000IduTdmConfigEntry			N/A	IDU TDM Links Configuration table entry. INDEX { winlink1000IduTdmConfigIndex }
winlink1000IduTdmCurrentTable			N/A	IDU TDM Links Statistics table.
winlink1000IduTdmCurrentEntry			N/A	IDU TDM Links Statistics table entry. INDEX { winlink1000IduTdmCurrentIndex }
winlink1000IduTdmBackupTable			N/A	IDU TDM Links Statistics table.
winlink1000IduTdmBackupEntry			N/A	IDU TDM Links Statistics table entry. INDEX { winlink1000IduTdmBackupIndex }
winlink1000HbsAirConfTable			N/A	Holds the table for all registered HSUs in the sector (16 entries).
winlink1000HbsAirConfEntry			N/A	HSUs configuration table entry. INDEX { winlink1000HbsAirConfIndex }
winlink1000HbsAirLinkTable			N/A	Holds the table for all links in the sector.
winlink1000HbsAirLinkEntry			N/A	Link table entry. INDEX { winlink1000HbsAirLinkIndex }
winlink1000HbsAirAtpcTargetRSSPerRateTable			N/A	Table of Atpc Target Rss Per Rate.
winlink1000HbsAirAtpcMaxAllowedRateEntry			N/A	Atpc Target Rss Per Rate table entry. INDEX { winlink1000HbsAirAtpcTargetRSSPerRateIndex }
winlink1000HbsBridgeVlanTable			N/A	Holds the bridge Vlan operations towards all the registered HSUs.
winlink1000HbsBridgeVlanEntry			N/A	HBS bridge Vlan table entry. INDEX { winlink1000HbsBridgeVlanIndex }
winlink1000HbsBridgeMembershipTable			N/A	Holds the bridge membership relations for all the registered HSUs.
winlink1000HbsBridgeMembershipEntry			N/A	HBS bridge membership table entry. INDEX { winlink1000HbsBridgeMembershipIndex }
winlink1000HbsServiceVlanTable			N/A	Holds the Vlan operations towards all the registered HSUs.
winlink1000HbsServiceVlanEntry			N/A	HBS service Vlan table entry. INDEX { winlink1000HbsServiceVlanIndex }
winlink1000HbsServiceQoSTable			N/A	Holds the QoS operations towards all the registered HSUs.
winlink1000HbsServiceQoSEntry			N/A	HBS service QoS table entry. INDEX { winlink1000HbsServiceQoSIndex }
winlink1000HbsServiceRadiusServerTable			N/A	Holds the Radius Server configurations
winlink1000HbsServiceRadiusServerEntry			N/A	HBS service Radius server table entry. INDEX { winlink1000HbsServiceRadiusServerIndex }
winlink1000HbsServiceCategoryTable			N/A	Holds the Radius Service Category profiles

Table 4-3: Private MIB Parameters - HSU (Sheet 19 of 37)

Name	OID	Type	Access	Description
winlink1000HbsServiceCategoryEntry			N/A	HBS service Radius Service Category table entry. INDEX { winlink1000HbsServiceCategoryIndex }
winlink1000HbsPerfMonThreshTable			N/A	Holds the performance monitor thresholds towards all the registered HSUs.
winlink1000HbsPerfMonThreshEntry			N/A	HBS performance monitor threshold table entry. INDEX { winlink1000HbsPerfMonThreshIndex }
winlink1000HbsPerfMonAirGenCurrTable			N/A	This table defines/keeps the ethernet counters of the current 15 min interval.
winlink1000HbsPerfMonAirGenCurrEntry			N/A	This is an entry in the Current Interval Table. INDEX {ifIndex }
winlink1000HbsPerfMonAirGenIntervalTable			N/A	This table defines/keeps the ethernet counters of the last day (in resolution of 15 min intervals).
winlink1000HbsPerfMonAirGenIntervalEntry			N/A	This is an entry in the Interval Table. INDEX {ifIndex winlink1000HbsPerfMonAirGenIntervalIdx }
winlink1000HbsPerfMonAirGenDayTable			N/A	This table defines/keeps the ethernet counters of the last month (in resolution of days).
winlink1000HbsPerfMonAirGenDayEntry			N/A	This is an entry in the Days Table. INDEX {ifIndex winlink1000HbsPerfMonAirGenDayIdx }
winlink1000OduSrvRingTopologySupported			RO	Ring Topology options are: supported not supported
winlink1000OduSrvRingVlanIdIndex			RO	Index of VLAN ID of the internal ring messages.
winlink1000OduSrvRingEthStatus			RO	Represents the Ethernet service blocking state of a Rings link
winlink1000OduSrvQoSConfIndex			RO	Index of QoS Configuration.
winlink1000OduSrvConfVlanQGroups			RO	Frames classification according to VLAN Priority IDs.
winlink1000OduSrvConfDiffServQGroups			RO	Frames classification according to Diffserv.
winlink1000OduSrvQoSMaxRTQueuePercent			RO	Maximal percent for RT & NRT queues.
winlink1000OduSrvVlanSupport			RO	ODU Ethernet port VLAN support and configuration availability indication. 1 - ODU VLAN Functionality Not Supported 2 - ODU VLAN Functionality Supported 3 - ODU VLAN Functionality Supported and Available
winlink1000OduServiceVlanProviderListTPIDStr			RO	Holds the possible Provider TPIDs.
winlink1000OduBridgeBasePortIndex			RO	ODU Bridge Port Number.
winlink1000OduBridgeBaseIfIndex			RO	Ifindex corresponding to ODU Bridge port.
winlink1000OduAirChannelsIndex			RO	Channel Index.
winlink1000OduAirChannelsFrequency			RO	Channel frequency in MHz.
winlink1000OduAirChannelsAvail			RO	Channel state. Product specific and cannot be changed by the user. Automatic Channel Selection uses channels that are AirChannelsOperState enabled and AirChannelsAvail enabled. Valid values: disabled (0) enabled (1).
winlink1000OduAirChannelsDefaultFreq			RO	Default channel's availability for all CBWs. The valid values are: forbidden (0) available (1).
winlink1000OduAirChannelBWSSATDDConflictPerCBW			RO	Indication for possible Link drop per CBW due to conflict between HSS and ATDD.



Table 4-3: Private MIB Parameters - HSU (Sheet 20 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirChannelBWMinRatioForSupporting			RO	Minimal TX ratio that may be used by the HSM and still enable proper operation of the aforementioned CBW.
winlink1000OduAirChannelBWMaxRatioForSupporting			RO	Maximal TX ratio that may be used by the HSM and still enable proper operation of the aforementioned CBW.
winlink1000OduAirRatesIndex			RO	Air Rate index.
winlink1000OduAirRatesAvail			RO	Air Rate availability depending on air interface conditions.
winlink1000OduAirHssRfpTdmChannelBW5MHz			RO	Represents the compatibility of TDM service under Channel BW of 5MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpTdmChannelBW10MHz			RO	Represents the compatibility of TDM service under Channel BW of 10MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpTdmChannelBW20MHz			RO	Represents the compatibility of TDM service under Channel BW of 20MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssRfpTdmChannelBW40MHz			RO	Represents the compatibility of TDM service under Channel BW of 40MHz in the specific Radio Frame Pattern.
winlink1000OduAirHssInterSiteSynchronizationAvailability			RO	Inter-Site Synchronization Availability
winlink1000OduAirHssSupportedSynchronizationProtocol			RO	Supported Synchronization Protocols
winlink1000OduAirHssNumberOfDiscoveredODUs			RO	Number OF Discovered ODUs in network.
winlink1000OduAirHssDiscoverIndex			RO	HSS Discover Table Index.
winlink1000OduAirHssDiscoverODUDescription			RO	Hold ODU HSS status in compress format: Domain IP HSS Role Hss support Enabled HSS protocol Sync Status Location IPv6.
winlink1000OduAirHssMasterSlaveCompatibility			RO	EHSM version compatibility. Relevant to Ethernet HSS Clients only.
winlink1000OduAirHssNumberOfAssociatedCUs			RO	Number of associated Ethernet HSS Clients. Relevant to Ethernet HSS Masters only
winlink1000OduAirHssAssociatedCUIndex			RO	Associated Ethernet HSS Clients Table Index. Relevant for Ethernet HSS Masters only.
winlink1000OduAirHssAssociatedCUDescription			RO	Holds Associated Ethernet HSS Clients Description in compress format: IP Delay Compatibility Ethernet Speed Ethernet Rx rate IPv6
winlink1000OduAirHssSyncStatusEth			RO	Ethernet HSS Client Synchronization Level
winlink1000OduAirHssHSMIPAddress			RO	HSMs IP address. Relevant for HSC synchronized over Ethernet.
winlink1000OduAirHssDelayToHSM			RO	Delay in microseconds to HSM. Relevant for HSC synchronized over Ethernet.
winlink1000OduAirHssHSMIPv6Address			RO	HSMs IPv6 address. Relevant for HSC synchronized over Ethernet.
winlink1000OduAirCurrentNetMasterTxRatio			RO	Represents the actual Net Master Tx Ratio.
winlink1000OduAirMinUsableMasterTxRatio			RO	Represents the minimal value the user can configure for Desired net mAsTer Tx Ratio.

Table 4-3: Private MIB Parameters - HSU (Sheet 21 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirMaxUsableMasterTxRatio			RO	Represents the maximal value the user can configure for Desired net mAsTer Tx Ratio.
winlink1000OduPerfMonIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonIntervalUAS			RO	The current number of Unavailable Seconds per interval.
winlink1000OduPerfMonIntervalES			RO	Current number of Errored Seconds per interval.
winlink1000OduPerfMonIntervalSES			RO	Current number of Severely Errored Seconds per interval.
winlink1000OduPerfMonIntervalBBE			RO	Current number of Background Block Errors per interval.
winlink1000OduPerfMonIntervalIntegrity			RO	Indicates the integrity of the entry per interval.
winlink1000OduPerfMonIntervalCompressed			RO	Holds a compressed string of all data per interface. Compressed Air Interface Structure (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) MinRSL (1) MaxRSL (1) RSLThresh1Exceeded (4) RSLThresh2Exceeded (4) MinTSL (1) MaxTSL (1) TSLThresh1Exceed (4) BBERThresh1Exceed (4) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) Compressed Ethernet ODU interface (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) ActiveSeconds (1)
winlink1000OduPerfMonDayIdx			RO	This table is indexed per interval number. Each interval is of 24 hours and the oldest is 30.
winlink1000OduPerfMonDayUAS			RO	The current number of Unavailable Seconds per interval of 24 hours.
winlink1000OduPerfMonDayES			RO	Current number of Errored Seconds per interval of 24 hours.
winlink1000OduPerfMonDaySES			RO	Current number of Severely Errored Seconds per interval of 24 hours.
winlink1000OduPerfMonDayBBE			RO	Current number of Background Block Errors per interval of 24 hours.
winlink1000OduPerfMonDayIntegrity			RO	Indicates the integrity of the entry per interval of 24 hours.
winlink1000OduPerfMonDayCompressed			RO	Holds a compressed string of all data per interface. Compressed Air Interface Structure (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) MinRSL (1) MaxRSL (1) RSLThresh1Exceeded (4) RSLThresh2Exceeded (4) MinTSL (1) MaxTSL (1) TSLThresh1Exceed (4) BBERThresh1Exceed (4) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) Compressed Ethernet ODU interface (size in brackets): UAS (4) ES (4) SES (4) BBE (4) Integrity (1) RxMBytes (4) TxMBytes (4) EthCapacityThreshUnder (4) HighTrafficThreshExceed (4) ActiveSeconds (1)
winlink1000OduPerfMonAirIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonAirIntervalMinRSL			RO	Current Min Received Level Reference per interval.
winlink1000OduPerfMonAirIntervalMaxRSL			RO	Current Max Received Level Reference per interval.
winlink1000OduPerfMonAirIntervalRSLThresh1Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL1 threshold per interval.

Table 4-3: Private MIB Parameters - HSU (Sheet 22 of 37)

Name	OID	Type	Access	Description
winlink1000OduPerfMonAirIntervalMinTSL			RO	Current Min Transmit Signal Level per interval.
winlink1000OduPerfMonAirIntervalMaxTSL			RO	Current Max Transmit Signal Level per interval.
winlink1000OduPerfMonAirIntervalTSLThresh1Exceed			RO	Number of seconds Transmit Signal Level exceeded the TSL1 threshold per interval.
winlink1000OduPerfMonAirIntervalBBERTThresh1Exceed			RO	Number of seconds Background Block Error Ratio exceeded the BBER1 threshold per interval.
winlink1000OduPerfMonAirDayIdx			RO	This table is indexed per Day number. Each Day is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonAirDayMinRSL			RO	Current Min Received Level Reference per Day.
winlink1000OduPerfMonAirDayMaxRSL			RO	Current Max Received Level Reference per Day.
winlink1000OduPerfMonAirDayRSLThresh1Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL1 threshold per Day.
winlink1000OduPerfMonAirDayRSLThresh2Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL2 threshold per Day.
winlink1000OduPerfMonAirDayMinTSL			RO	Current Min Transmit Signal Level per Day.
winlink1000OduPerfMonAirDayMaxTSL			RO	Current Max Transmit Signal Level per Day.
winlink1000OduPerfMonAirDayTSLThresh1Exceed			RO	Number of seconds Transmit Signal Level exceeded the TSL1 threshold per Day.
winlink1000OduPerfMonAirDayBBERTThresh1Exceed			RO	Number of seconds Background Block Error Ratio exceeded the BBER1 threshold per Day.
winlink1000OduPerfMonEthIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonEthIntervalRxMBytes			RO	Current RX Mega Bytes per interval.
winlink1000OduPerfMonEthIntervalTxMBytes			RO	Current Transmit Mega Bytes per interval.
winlink1000OduPerfMonEthIntervalEthCapacityThreshUnder			RO	The number of times throughput was below threshold in the each interval. Relevant for point to point systems.
winlink1000OduPerfMonEthIntervalHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold in the each interval.
winlink1000OduPerfMonEthIntervalActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked in the each interval.
winlink1000OduPerfMonEthDayIdx			RO	This table is indexed per Day number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonEthDayRxMBytes			RO	Current RX Mega Bytes per day.
winlink1000OduPerfMonEthDayTxMBytes			RO	Current Transmit Mega Bytes per day.
winlink1000OduPerfMonEthDayEthCapacityThreshUnder			RO	The number of times throughput was below threshold each day. Relevant for point to point systems.

Table 4-3: Private MIB Parameters - HSU (Sheet 23 of 37)

Name	OID	Type	Access	Description
winlink1000OduPerfMonEthDayHighTrafficThresholdExceed			RO	The number of times actual traffic was above threshold each day.
winlink1000OduPerfMonEthDayActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked each day.
winlink1000OduPerfMonTdmIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonTdmIntervalActiveSeconds			RO	Parameter indicating whether the TDM service was active. Under TDM backup link the parameter indicates whether the backup link was active.
winlink1000OduPerfMonTdmDayIdx			RO	This table is indexed per Day number. Each interval is of 15 minutes and the oldest is 96.
winlink1000OduPerfMonTdmDayActiveSeconds			RO	Parameter indicating whether the TDM service was active. Under TDM backup link the parameter indicates whether the backup link was active.
winlink1000IduAdmProductType			RO	IDU configuration description.
winlink1000IduAdmHwRev			RO	IDU Hardware Revision.
winlink1000IduAdmSwRev			RO	IDU Software Revision.
winlink1000OduAdmNumOfExternalAlarmIn			RO	Indicates the number of currently available External Alarm Inputs.
winlink1000OduAdmExternAlarmInIndex			RO	This value indicates the index of the External Alarm Input entry.
winlink1000OduAdmExternAlarmInStatus			RO	This value indicates the current status of the External Alarm Input.
winlink1000IduAdmSN			RO	IDU Serial Number
winlink1000IduAdmMountedTrunks			RO	Number of mounted trunks in the IDU
winlink1000IduAdmLicensedTrunks			RO	Number of Licensed Trunks in the IDU
winlink1000IduAdmVlanSupported			RO	Identifies if the local IDU supports VLAN tag/untag
winlink1000IduSrvServices			RO	This parameter is reserved to the Manager application provided with the product.
winlink1000IduSrvActiveTrunks			RO	A bitmap describing the currently open TDM trunks.
winlink1000IduSrvAvailableTrunks			RO	A bitmap describing the number of TDM trunks that can be opened in the current configuration. The values take into account the IDU hardware configuration the air rate and the installation range.
winlink1000IduSrvPossibleServicesIndex			RO	Table index Rate index of the air interface.
winlink1000IduSrvPossibleTdmServices			RO	Deprecated parameter. A bitmap describing the TDM trunks that can be opened in the corresponding Air Rate.
winlink1000IduSrvPossibleEthServices			RO	Deprecated parameter. This parameter describes if the Ethernet Service can be opened in the corresponding Air Rate. The valid values are: disabled (0) enabled (1).
winlink1000IduSrvRemainingRate			RO	Current Ethernet bandwidth in bps per air rate.
winlink1000IduSrvTrunkCost			RO	Cost of the TDM Service in bps.
winlink1000IduSrvAvailServicesIndex			RO	Table index. The index is the bit mask of the TDM service.

Table 4-3: Private MIB Parameters - HSU (Sheet 24 of 37)

Name	OID	Type	Access	Description
winlink1000IduSrvAvailServicesState			RO	Represents the TDM service availability.
winlink1000IduSrvAvailServicesMinRateIdx			RO	Minimum rate index of the air interface which make the service possible.
winlink1000IduSrvAvailServicesMaxRateIdx			RO	Maximum rate index of the air interface which make the service possible.
winlink1000IduSrvAvailServicesReason			RO	Information about the TDM Service availability. - Not Applicable if the service is available. The reasons for TDM Service unavailability: - The available throughput isn't sufficient for Service demands; - The IDU HW doesn't support the service; - A Link Password mismatch was detected; - The external pulse type detected is improper for TDM services; - A Software versions mismatch was detected. - A-Symmetric TDD Mode Is Obligated.
winlink1000IduSrvEthActive			RO	Represents the Ethernet service activation state.
winlink1000IduSrvEthAvailable			RO	Represents the Ethernet service availability state.
winlink1000IduSrvEthThroughput			RO	Current available Ethernet service throughput in bps.
winlink1000IduSrvAvailableTrunksT1			RO	A bitmap describing the TDM trunks that can be opened under T1 configuration. The values take into account the IDU hardware configuration the air rate and the installation range.
winlink1000IduEthernetIfIndex			RO	If Index corresponding to this Interface.
winlink1000IduEthernetIfAddress			RO	IDU MAC address.
winlink1000IduEthernetNumOfLanPorts			RO	Number of LAN interfaces in the IDU.
winlink1000IduEthernetNumOfSfpPorts			RO	The number of SFP interfaces in the IDU.
winlink1000IduEthernetSfpProperties			RO	SFP venfor properties : Vendor Name PN and Revision.
winlink1000IduEthernetOduInErrors			RO	The number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol.
winlink1000IduTdmTxClockAvailStates			RO	Available states of the TDM Transmit Clock Control each input status is represented by a bit. When the state is available the bit value is 1. When the state is unavailable the bit value is 0. The available states are: bit 2 = Transparent bit 3 = Local Loop Timed bit 4 = Remote Loop Timed bit 5 = Local Internal bit 6 = Remote Internal
winlink1000IduTdmTxClockActualState			RO	Actual state of the TDM Transmit Clock Control.
winlink1000IduTdmMasterClockAvailOptions			RO	Available options of the TDM Master Clock Control each input status is represented by a bit. When the option is available the bit value is 1. When the option is unavailable the bit value is 0. The available options are: bit 2 = Automatic bit 3 = Trunk #1 bit 4 = Trunk #2 bit 5 = Trunk #3 bit 6 = Trunk #4 When no options are available the returned value is: 1
winlink1000IduTdmMasterClockActual			RO	Actual Trunk used for TDM Master Clock.
winlink1000IduTdmConfigIndex			RO	Table index.
winlink1000IduTdmIfIndex			RO	Link index in the interface table.



Table 4-3: Private MIB Parameters - HSU (Sheet 25 of 37)

Name	OID	Type	Access	Description
winlink1000IduTdmLineStatus			RO	Line status.
winlink1000IduTdmCurrentIndex			RO	Table index (Same as winlink1000IduTdmLineIndex).
winlink1000IduTdmCurrentBlocks			RO	Number of correct blocks transmitted to the line.
winlink1000IduTdmCurrentDrops			RO	Number of error blocks transmitted to the line.
winlink1000IduTdmCurrentBlocksHigh			RO	High part of the 64 bits counter Current Blocks
winlink1000IduTdmRemoteQual			RO	Estimated average interval between error second events. The valid values are 1-2 <sup>31</sup> where a value of -1 is used to indicate an undefined state.
winlink1000IduTdmRemoteQualEval			RO	Estimated average interval between error second events during evaluation process. The valid values are 1-2 <sup>31</sup> where a value of -1 is used to indicate an undefined state.
winlink1000IduTdmBackupAvailableLinks			RO	Number of TDM backup trunks.
winlink1000IduTdmBackupIndex			RO	Table index.
winlink1000IduTdmBackupCurrentActiveLink			RO	TDM backup current active link: N/A air link is active or external link is active.
winlink1000IduTdmJitterBufferDefaultSize			RO	TDM Jitter Buffer Default Size. The units are 0.1 x millisecond.
winlink1000IduTdmJitterBufferMinSize			RO	TDM Jitter Buffer Minimum Size. The units are 0.1 x millisecond.
winlink1000IduTdmJitterBufferMaxSize			RO	TDM Jitter Buffer Maximum Size. The units are 0.1 x millisecond.
winlink1000IduTdmLineStatusStr			RO	Line status.
winlink1000IduTdmHotStandbySupport			RO	Indicates if Hot Standby is supported.
winlink1000IduTdmHotStandbyOperationStatus			RO	The Link Actual Status.
winlink1000HbsAirState			RO	Holds the state of the HBS.
winlink1000HbsAirAvailTimeSlots			RO	This parameter holds the number of available time slots (not in use) in the air interface.
winlink1000HbsAirSectorCbwSupportedStr			RO	Represents the channel bandwidth which is supported by the HBS and all connected HSUs.
winlink1000HbsAirCompressedMon			RO	Holds HBS monitor data in compressed format: HBS Traffic Monitor In Bytes(4) Out Bytes(4) In Frames(4) Out Frames(4) HBS State (1) HBS Freq (4) Number of Links (2) EC Change Counter (4) Current Ratio (2) Total Air Frames (4) HBS Rx Rate in Kbps (4) HBS Tx Rate in Kbps (4) HBS Rx Rate in Fps (4) HBS Tx Rate in Fps (4) HBS Set Mode (1) HBS LAN 1 Rx Rate in Kbps (4) HBS LAN 1 Tx Rate in Kbps (4) HBS LAN 1 Rx Rate in Fps (4) HBS LAN 1 Tx Rate in Fps (4) HBS LAN 2 Rx Rate in Kbps (4) HBS LAN 2 Tx Rate in Kbps (4) HBS LAN 2 Rx Rate in Fps (4) HBS LAN 2 Tx Rate in Fps (4) SyncE Performance (1).
winlink1000HbsAirConfChanges			RO	16 characters that represent 16 HSUs. Each time a configuration is been changed increment the relevant character.
winlink1000HbsAirConfIndex			RO	HSUs configuration table index.
winlink1000HbsAirConfMacAddress			RO	HSU MAC Address.

Table 4-3: Private MIB Parameters - HSU (Sheet 26 of 37)

Name	OID	Type	Access	Description
winlink1000HbsAirConfServiceCategory			RO	Indicates Service Category received from Radius server values can be from 1 to 8 0 - undefined
winlink1000HbsAirLinkNumOfLinks			RO	Number of links in the links table.
winlink1000HbsAirLinkIndex			RO	HSUs configuration table index.
winlink1000HbsAirLinkHsuld			RO	HSU ID of specific link (if registered). Unregistered links have -1.
winlink1000HbsAirLinkState			RO	Holds the state of specific link.
winlink1000HbsAirLinkWorkingMode			RO	Indicates the sub-state within the version compatibility.
winlink1000HbsAirLinkSessionId			RO	Holds the Session ID of the link.
winlink1000HbsAirLinkHbsEstTput			RO	Holds the Estimated throughput from the HBS to the HSU.
winlink1000HbsAirLinkHsuEstTput			RO	Holds the Estimated throughput from the HSU to the HBS.
winlink1000HbsAirLinkRange			RO	Holds the range of specific link.
winlink1000HbsAirLinkHbsRss			RO	Holds the RSS of specific link (HBS side).
winlink1000HbsAirLinkHbsRssBal			RO	Holds the RSS Balance of specific link (HBS side). -2 : Radio 2 RSS is much stronger than Radio 1 RSS. -1 : Radio 2 RSS is stronger than Radio 1 RSS. -0 : Radio 2 RSS is equal to Radio 1 RSS. 1 : Radio 1 RSS is stronger than Radio 2 RSS. 2 : Radio 1 RSS is much stronger than Radio 2 RSS.
winlink1000HbsAirLinkHsuRss			RO	Holds the RSS of specific link (HSU side).
winlink1000HbsAirLinkHsuRssBal			RO	Holds the RSS Balance of specific link (HSU side). -2 : Radio 2 RSS is much stronger than Radio 1 RSS. -1 : Radio 2 RSS is stronger than Radio 1 RSS. -0 : Radio 2 RSS is equal to Radio 1 RSS. 1 : Radio 1 RSS is stronger than Radio 2 RSS. 2 : Radio 1 RSS is much stronger than Radio 2 RSS.
winlink1000HbsAirLinkHsuSerial			RO	Holds the serial number for specific HSU.
winlink1000HbsAirLinkTxOperMode			RO	Holds the TX operation mode.
winlink1000HbsAirHsuInBytes			RO	Number of frames received in the HSU Lan port.
winlink1000HbsAirHsuOutBytes			RO	Number of frames transmitted from the HSU Lan port.
winlink1000HbsAirHsuInFrames			RO	Number of bytes received in the HSU Lan port.
winlink1000HbsAirHsuOutFrames			RO	Number of bytes transmitted from the HSU Lan port.
winlink1000HbsAirHsuMacAddress			RO	HSU MAC Address.
winlink1000HbsAirMaxTputDown			RO	Max Throughput Downlink.
winlink1000HbsAirMaxTputUp			RO	Max Throughput Uplink.

Table 4-3: Private MIB Parameters - HSU (Sheet 27 of 37)

Name	OID	Type	Access	Description
winlink1000HbsAirLinkCompressedMon			RO	Holds all the link information in compressed binary (Bytes/octets). Fields included (size in bytes): Link State(1) Link Working Mode(1) Session Id(4) HBS Est. Tput(4) HSU Est. Tput(4) HBS Rss(1) HBS Rss Balance(1) HSU Rss(1) HSU Rss Balance(1) Tx Operation Mode(1) HSU In Bytes(4) HSU Out Bytes(4) HSU In Frames(4) HSU Out Frames(4) HSU ID (1 bytes) HSU Rx Rate In Kbps (4) HSU Tx Rate In Kbps (4) HSU Rx Rate In Fps (4) HSU Tx Rate In Fps (4) Peak throughput in the DL direction (4) Peak throughput in the UL direction (4) Number of local changes at HSU(1) Alignment Status(1) HBS Chain 1 Rss(1) HBS Chain 2 Rss(1) HBS Chain 3 Rss(1) HSU Chain 1 Rss(1) HSU Chain 2 Rss(1) HSU Chain 3 Rss(1) HSU Current Rate Index (2 bytes) HSU Current Rate CBW (1 bytes) HSU Current Rate GI (1 bytes) HBS Current Rate Index (2 bytes) HBS Current Rate CBW (1 bytes) HBS Current Rate GI (1 bytes) Bsa Azimuth(2) HSU LAN 1 Rx Rate In Kbps (4) HSU LAN 1 Tx Rate In Kbps (4) HSU LAN 1 Rx Rate In Fps (4) HSU LAN 1 Tx Rate In Fps (4) HSU LAN 2 Rx Rate In Kbps (4) HSU LAN 2 Tx Rate In Kbps (4) HSU LAN 2 Rx Rate In Fps (4) HSU LAN 2 Tx Rate In Fps (4) 1588TC Performance(1) SyncE Performance(1) ATPC status (1)
winlink1000HbsAirLinkCompressedStatic			RO	Holds all the configuration data of this link in compressed format. Helps the NMS to get info regarding new Unregistered links. Fields Included: SessionID (4 bytes) HSU IP address (4 bytes) HSU Name (32 bytes) HSU Location (32 bytes) HSU Serial number (16 bytes) HSU MAC Address (12 bytes) Air Link Range Max Throughput Down (4 bytes) Max Throughput Up. (4 bytes) Capacity Limit (4 bytes) HSU Antenna type (1 byte) Aggregate Capacity (4 bytes) 1588TC supported (1 byte) SyncE supported (1 byte)
winlink1000HbsAirCpeCapacityLimit			RO	Capacity Limit in Kilo bit per second.
winlink1000HbsAirLinkAntennaType			RO	HSU External Antenna Type: Monopolar or Bipolar.
winlink1000HbsAirHsuRxRateInKbps			RO	HSU Rx Rate in Kbps.
winlink1000HbsAirHsuTxRateInKbps			RO	HSU Tx Rate in Kbps.
winlink1000HbsAirHsuRxRateInFps			RO	HSU Rx Rate in Fps.
winlink1000HbsAirHsuTxRateInFps			RO	HSU Tx Rate in Fps.
winlink1000HbsAirLinkPeakTputDown			RO	Peak throughput in the DL direction (kbps).
winlink1000HbsAirLinkPeakTputUp			RO	Peak throughput in the UL direction (kbps).
winlink1000HbsAirLinkUtilDownSecRelMill			RO	The average time percentage (in thousandths) out of the BTS DL capability that was used for transmitting data to the SU.
winlink1000HbsAirLinkUtilUpSecRelMill			RO	The average time percentage (in thousandths) out of the BTS UL capability that was used for receiving data from the SU.
winlink1000HbsAirLinkUtilDownAllocRelMill			RO	The time percentage (in thousandths) relative to the SU DL allocation that was used for transmitting data to the SU.
winlink1000HbsAirLinkUtilUpAllocRelMill			RO	The time percentage (in thousandths) relative to the SU UL allocation that was used for receiving data from the SU.
winlink1000HbsAirLinkUtilDownTrafficKbps			RO	Average data throughput (Exported in Kbps) transmitted in the DL towards the SU during the last second.
winlink1000HbsAirLinkUtilUpTrafficKbps			RO	Average data throughput (Exported in Kbps) received in the UL from the SU during the last second.

Table 4-3: Private MIB Parameters - HSU (Sheet 28 of 37)

Name	OID	Type	Access	Description
winlink1000HbsAirLinkUtilCompressedMon			RO	One string that holds the 6 Utilization per link values: DownSecRel (2 bytes) UpSecRel (2 bytes) DownAllocRel (4 bytes) UpAllocRel (4 bytes) DownTraffic (4 bytes) UpTraffic (4 bytes).
winlink1000HbsAirLinkBsaAzimuth			RO	Absolute (geographical) azimuth of the HSU (looking from HBS site).
winlink1000HbsAirLink1588TCPerformance			RO	TC performance.
winlink1000HbsAirLinkSyncEPerformance			RO	SyncE performance.
winlink1000HbsAirAvailTimeSlotsUp			RO	This parameter holds the number of available UL time slots (not in use) in the air interface.
winlink1000HbsAirDownUtilMill			RO	Sector Air Interface utilization in the Downlink direction (thousandths). Average time percentage out of the entire BTS DL capability that was used for transmitting data to all the SUs.
winlink1000HbsAirUpUtilMill			RO	Sector Air Interface utilization in the Uplink direction (thousandths). The average number of timeslots that were used in the UL (by all the links) out of the entire number of timeslots.
winlink1000HbsAirDownTrafficKbps			RO	Average data throughput (expressed in Kbps) transmitted in the DL towards all the SUs during the last second.
winlink1000HbsAirUpTrafficKbps			RO	Average data throughput (expressed in Kbps) received in the UL from all the SUs during the last second.
winlink1000HbsAirCompressedMonSec			RO	One string that holds the 4 Utilization per Sector values: DownUtil (2 bytes) UpUtil (2 bytes) DownTraffic (4 bytes) UpTraffic (4 bytes).
winlink1000HbsAirMobilityAzTrack			RO	Azimuth tracking for mobility status: 1 = Not applicable 2 = Active 3 = Impossible
winlink1000HbsAirSyncEPerformance			RO	SyncE performance when HBS is not reference clock
winlink1000HbsAirAtpcMaxAllowedRate			RO	Max allowed rate (will be 207 for N products and 209 for AC products)
winlink1000HbsAirAtpcTargetRSSPerRateIndex			RO	Atpc Target Rss Per Rate Index.
winlink1000HbsAirAtpcTargetRSSPerRate			RO	Atpc Target Rss Per Rate value.
winlink1000HbsBridgeVlanIndex			RO	HBS bridge Vlan table index.
winlink1000HbsBridgeMembershipIndex			RO	HBS bridge membership table index.
winlink1000HbsServiceVlanIndex			RO	HBS service Vlan table index.
winlink1000HbsServiceQoSMaxRtQuePct			RO	Maximal percent for RT and NRT queues.
winlink1000HbsServiceQoSIndex			RO	HBS service QoS table index.
winlink1000HbsServiceMobilitySupported			RO	Mobility Support (1 = Not supported 2 = Supported 3 - Transport supported)
winlink1000HbsServiceMaxNumOfHSUs			RO	Holds the maximum number of registered HSUs in the HBS.
winlink1000HbsServiceSynchronizationSyncESupportedReferenceClock			RO	List of valid Reference Clk HBS/HSU + Port ID.
winlink1000HbsServiceRadiusServerIndex			RO	Radius Server table index.

Table 4-3: Private MIB Parameters - HSU (Sheet 29 of 37)

Name	OID	Type	Access	Description
winlink1000HbsPerfMonThreshIndex			RO	HBS performance monitor threshold table index.
winlink1000HbsPerfMonAirGenCurrRxMBytes			RO	Current RX Mega Bytes starting from the present 15 minutes period. (Represents the LAN traffic RX direction toward the HSU)
winlink1000HbsPerfMonAirGenCurrTxMBytes			RO	Current Transmit Mega Bytes starting from the present 15 minutes period. (Represents the LAN traffic TX direction from the HSU)
winlink1000HbsPerfMonAirGenCurrEthCapacityThreshUnder			RO	The number of times throughput was below threshold in the present 15 minutes period. Relevant for point to point systems.
winlink1000HbsPerfMonAirGenCurrHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold in the present 15 minutes period.
winlink1000HbsPerfMonAirGenCurrActiveSeconds			RO	The number of seconds in which RPL Ethernet swservice was not blocked in the present 15 minutes period.
winlink1000HbsPerfMonAirGenIntervalIdx			RO	This table is indexed per interval number. Each interval is of 15 minutes and the oldest is 96.
winlink1000HbsPerfMonAirGenIntervalRxMBytes			RO	Current RX Mega Bytes per interval. (Represents the LAN traffic RX direction toward the HSU).
winlink1000HbsPerfMonAirGenIntervalTxMBytes			RO	Current Transmit Mega Bytes per interval. (Represents the LAN traffic TX direction from the HSU)
winlink1000HbsPerfMonAirGenIntervalEthCapacityThreshUnder			RO	The number of times throughput was below threshold in the each interval. Relevant for point to point systems.
winlink1000HbsPerfMonAirGenIntervalHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold in the each interval.
winlink1000HbsPerfMonAirGenIntervalActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked in the each interval.
winlink1000HbsPerfMonAirGenDayIdx			RO	This table is indexed per Day number. Each interval is of 15 minutes and the oldest is 96.
winlink1000HbsPerfMonAirGenDayRxMBytes			RO	Current RX Mega Bytes per day. (Represents the LAN traffic RX direction toward the HSU)
winlink1000HbsPerfMonAirGenDayTxMBytes			RO	Current Transmit Mega Bytes per day. (Represents the LAN traffic TX direction from the HSU)
winlink1000HbsPerfMonAirGenDayEthCapacityThreshUnder			RO	The number of times throughput was below threshold each day. Relevant for point to point systems.
winlink1000HbsPerfMonAirGenDayHighTrafficThreshExceed			RO	The number of times actual traffic was above threshold each day.
winlink1000HbsPerfMonAirGenDayActiveSeconds			RO	The number of seconds in which RPL Ethernet service was not blocked each day.
winlink1000HsuAdminSiteSurveySupport			RO	This value indicates if site survey is supported or not supported.
winlink1000GeneralTrapDescription			RO	Trap's Description. Used for Trap parameters.
winlink1000GeneralTrapSeverity			RO	Trap's Severity. Used for Trap parameters.
winlink1000GeneralEcChangesCounter			RO	This counter is initialized to 0 after a device reset and is incremented upon each element constant write operation via SNMP or Telnet.



Table 4-3: Private MIB Parameters - HSU (Sheet 30 of 37)

Name	OID	Type	Access	Description
winlink1000OduSrvRingLinkMode			RW	Mode of the link regarding ring topology.
winlink1000OduSrvRingVlanId			RW	VLAN ID of the internal ring messages. Valid values are 1 to 4094. Initial value is 0 meaning VLAN unaware.
winlink1000OduSrvRingMaxAllowedTimeFromLastRpm			RW	Defines the minimal time (in ms) required for determination of ring failure.
winlink1000OduSrvRingWTR			RW	Defines the minimal time (in ms) required for ring recovery.
winlink1000OduSrvQoSMode			RW	Mode of QoS feature.
winlink1000OduSrvConfQueMir			RW	Desired Private MIR.
winlink1000OduSrvConfQueWeight			RW	QoS queue's weights in percent.
winlink1000OduSrvQoS VlanQGroupsSetStr			RW	Frames classification according to VLAN IDs string for set.
winlink1000OduSrvQoS DiffservQGroupsSetStr			RW	Frames classification according to Diffserv IDs string for set.
winlink1000OduSrvVlanIngressMode			RW	ODU Ethernet port ingress VLAN mode.
winlink1000OduSrvVlanEgressMode			RW	ODU Ethernet port egress VLAN mode.
winlink1000OduSrvEgressTag			RW	ODU ethernet port egress VLAN tag. Right most digit is Vlan priority (0-7) other digits compose Vlan Id (2-4094)
winlink1000OduSrvEgressProviderTag			RW	ODU ethernet port egress Provider VLAN tag. Right most digit is Vlan priority (0-7) other digits compose Vlan Id (2-4094)
winlink1000OduSrvVlanIngressAllowedVIDs			RW	ODU ethernet port VLAN IDs that will not be filtered on ingress. w w w w w w w w  ( where w = {0-4094} and w != 1 )
winlink1000OduSrvVlanDisable			RW	Disable VLAN functionality. The following values can be set: 3 - Disable ODU & IDU VLAN Configurations.
winlink1000OduAirChannelsOperState			RW	Channel state. Can be set by the user. Automatic Channel Selection uses channels that are AirChannelsOperState enabled and AirChannelsAvail enabled. A change is effective after link re-synchronization. Valid values: disabled (0) enabled (1). Rewriteable only in Point-To-Point products.
winlink1000OduAirHssInterSiteSynchronizationMode			RW	Inter-Site Synchronization Mode - independent / synchronized
winlink1000OduAirHssSatellitesSatSyncRequired			RW	Satellites Synchronization Is Required
winlink1000OduAirHssDomainID			RW	EHSS domain. Identify set of CUs with same HSS synchronization
winlink1000OduAirHssDesiredSynchronizationProtocol			RW	Desired Synchronization Protocols
winlink1000OduAirHssDiscover			RW	Initiate Discovery process of ODUs on the network.
winlink1000OduAirHssEthVlanTag			RW	Ethernet HSS VLAN Tag: The least significant decimal digit is the Vlan Priority(0-6) and the rest of the digits represents Vlan ID (2-4094)
winlink1000OduAirHssSyncAcquisitionSeconds			RW	Accumulated quantity of seconds in clock acquisition while connected to current HSM

Table 4-3: Private MIB Parameters - HSU (Sheet 31 of 37)

Name	OID	Type	Access	Description
winlink1000OduAirCapacityDirection			RW	Capacity direction of the site.
winlink1000OduAirSpectrumAnalysisTimeout			RW	Spectrum analysis timeout in seconds.
winlink1000OduAirDesiredNetMasterTxRatio			RW	This parameter is reserved to the element manager provided with the product.
winlink1000OduAirPreferredChannelsStr			RW	A string representing the preferred channels. Each character represents one channel when '1' means its preferred and '0' means its not.
winlink1000OduAirSyncLossThreshold			RW	When the current throughput is below this threshold (in Kbps) sync loss will occur.
winlink1000OduAirALPMDataBufferStr			RW	A string that holds all of the ALPM events data
winlink1000OduAirGPSAntennaType			RW	GPS Antenna type.
winlink1000OduAgnGenLocalConnectionMode			RW	Local Connection (Broadcast) Configuration Mode. Options are: 1 - SNMP Read-Write 2 - SNMP Read-Only.
winlink1000OduAdmExternAlarmInText			RW	This field describes the External Alarm Input. It is an optional string of no more than 64 characters which will be used in the event being sent as a result of a change in the status of the External Alarm Input. DEFVAL {Alarm Description}
winlink1000OduAdmExternAlarmInAdminState			RW	This value indicates if this External Alarm Input is enabled or disabled.
winlink1000IduAdmIduDetectionMode			RW	The parameter defines whether to send Ethernet frames to detect an IDU. The valid writable values are: userDisabled (3) userEnabled (4). A change requires a reset and is effective after reset.
winlink1000IduAdmVlanEgressMode			RW	VLAN tag/untag egress values
winlink1000IduAdmVlanIngressMode			RW	VLAN tag/untag ingress values
winlink1000IduAdmVlanDefaultPortVIDs			RW	VLAN tag/untag default VLAN ids for each port - Right most digit is Vlan priority (0-6) other digits compose Vlan Id (1-4094)
winlink1000IduAdmVlanLan1UntaggedVIDs			RW	VLAN untagged VIDs for LAN1 port
winlink1000IduAdmVlanLan2UntaggedVIDs			RW	VLAN untagged VIDs for LAN2 port
winlink1000IduAdmVlanSfpUntaggedVIDs			RW	VLAN untagged VIDs for Sfp port
winlink1000IduAdmVlanLan1FilteredVIDs			RW	VLAN filtered VIDs for LAN1 port
winlink1000IduAdmVlanLan2FilteredVIDs			RW	VLAN filtered VIDs for LAN2 port
winlink1000IduAdmVlanSfpFilteredVIDs			RW	VLAN filtered VIDs for Sfp port
winlink1000IduAdmPortsConnection			RW	IDU ports connection bitmap. bit 0 - LAN1-LAN2 bit 1 - SFP-LAN1 bit 2 - SFP-LAN2 bit values: 0 - ports are disconnected. 1 - ports are connected.
winlink1000IduAdmVlanMode			RW	Local IDU Vlan Mode.
winlink1000IduAdmVlanMembershipVIDs			RW	VLAN Membership VLAN IDs list.

Table 4-3: Private MIB Parameters - HSU (Sheet 32 of 37)

Name	OID	Type	Access	Description
winlink1000IduAdmVlanMembershipPortsCode			RW	VLAN Membership ports code. Each value represent the relation (bitmap) Between the suitable VID to the IDU ports. bit 0 - LAN1 bit 1 - LAN2 bit 2 - SFP bit value 0 - not member of appropriate VID bit value 1 - member of appropriate VID
winlink1000IduAdmVlanMembershipUntaggedHandle			RW	VLAN Membership Untagged frames handling. The 3 values representing LAN1 LAN2 and SFP accordingly. For each port the optional values are: 1 - Discard 2 - Tag 3 - Leave Unmodified
winlink1000IduAdmVlanMembershipTagUntagged			RW	VLAN Membership Untagged frames tagging. The 3 values representing LAN1 LAN2 and SFP accordingly. The value on each port entry represent the tagging value which is built of: VLAN ID & VLAN Priority.
winlink1000IduSrvDesiredTrunks			RW	Required trunks bitmap. Note that the number of possible trunks that can be configured may vary based on the IDU hardware configuration the selected air interface rate and the range of the installation. The provided Manager application enables the user to select only available configurations. A change is effective immediately if applied to a master unit and the link is in service mode.
winlink1000IduSrvEthMaxInfoRate			RW	Holds the maximum bandwidth (kbps) to be allocated for Ethernet service. Value of zero means that Ethernet service works as best effort. The maximum value is product specific. Refer to the user manual.
winlink1000IduBridgeTypeAging			RW	Timeout in seconds for aging. Note that for this parameter to be effective the ODU must be configured to HUB mode. A change is effective immediately.
winlink1000IduTdmTxClockDesiredState			RW	Required state of the TDM Transmit Clock Control. A change is effective after re-activation of the TDM service.
winlink1000IduTdmMasterClockDesired			RW	Required TDM Master Clock. A change is effective after re-activation of the TDM service.
winlink1000IduTdmLineCoding			RW	This parameter applies to T1 trunks only. The parameter controls the line coding. Setting the value to each of the indices applies to all. A change is effective after the next open of the TDM service.
winlink1000IduTdmLoopbackConfig			RW	Loop back configuration table. Each of the trunks can be set Normal Line loop back or Reverse line loop back. A change is effective immediately.
winlink1000IduTdmCurrentTxClock			RW	TDM Transmit Clock. A change is effective after re-activation of the TDM service.
winlink1000IduTdmSrveval			RW	Evaluated TDM service bit mask. Setting this parameter to value that is bigger than the activated TDM service bit mask will execute the evaluation process for 30 seconds. Setting this parameter to 0 will stop the evaluation process immediately.
winlink1000IduTdmBackupMode			RW	TDM backup mode: Enable or Disable where the main link is the air link or the external link. Changes will be effective immediately.
winlink1000IduTdmJitterBufferSize			RW	TDM Jitter Buffer Size. The value must be between the minimum and the maximum TDM Jitter Buffer Size. The units are 0.1 x millisecond.
winlink1000IduTdmJitterBufferSizeEval			RW	TDM Jitter Buffer Size for evaluation. The value must be between the minimum and the maximum TDM Jitter Buffer Size. The units are 0.1 x millisecond.
winlink1000IduTdmType			RW	TDM Type (The value undefined is read-only).
winlink1000IduTdmTypeEval			RW	TDM Type for evaluation.
winlink1000IduTdmDesiredHotStandbyMode			RW	Desired Hot Standby Mode.

Table 4-3: Private MIB Parameters - HSU (Sheet 33 of 37)

Name	OID	Type	Access	Description
winlink1000IduDtmBackupLinkConfiguration			RW	The current configuration of the backup link.
winlink1000IduDtmLineInterfaceConfiguration			RW	TDM Line interface configuration.
winlink1000IduDtmLineImpedanceConfiguration			RW	TDM line impedance configuration (standardT1 - 100Ohm nonStandardT1 - 110Ohm) Applicable only for T1 TDM type.
winlink1000HbsAirOpMode			RW	Holds the operation mode of the HBS.
winlink1000HbsAirConfUpMir			RW	Uplink MIR towards specific HSU in units of kbps.
winlink1000HbsAirConfDownMir			RW	Downlink MIR towards specific HSU in units of kbps.
winlink1000HbsAirConfHsuName			RW	HSU name.
winlink1000HbsAirConfHsuLocation			RW	HSU location.
winlink1000HbsAirConfDualAntTxMode			RW	Transmission type when using Dual Antenna on both link's sides. spatial Multiplexing Diversity (using a single spatial stream) and Auto Selection (OMS control).
winlink1000HbsAirConfNumOfTs			RW	Number of time slot which are allocated to specific HSU.
winlink1000HbsAirConfGeoLocation			RW	Geographic device location in format: latitude longitude.
winlink1000HbsAirConfHsuType			RW	HSU type (1 = Fixed 2 = Stationary 3 = Mobile 4 = Transport)
winlink1000HbsAirConfHsuLevel			RW	HSU level (1 .. 4)
winlink1000HbsAirConfDesiredRateIndex			RW	The rate index of both sides of the link to this HSU.
winlink1000HbsAirConfNumOfTsUp			RW	Number of UL time slot which are allocated to specific HSU.
winlink1000HbsAirConfLanPortsConnection			RW	Indicates if the connection between LAN 1 and LAN 2 is enabled. 1- Enabled 2- Disabled.
winlink1000HbsAirConfAutoRealignmentConfiguration			RW	Configuration Parameters For Auto Realignment.
winlink1000HbsAirConfBeaconRssSyncLossThreshold			RW	RSS Threshold For Syncloss In Mobile Units
winlink1000HbsAirConfBeaconRssSyncLossInterval			RW	Interval over which the RSS value is below the threshold.
winlink1000HbsAirComboSwitchSectorFreqBandId			RW	Switch Frequency band for the whole sector.
winlink1000HbsAirGeoAzimuth			RW	Geographic sector azimuth in degrees * 10.
winlink1000HbsAirGeoBeamwidth			RW	Geographic sector beamwidth in degrees * 10.
winlink1000HbsAirMaxDistanceMetersMobility			RW	Maximum distance in meters. Used by Mobility links only.
winlink1000HbsAirComboSwitchSectorFreqBandIdStr			RW	Switch Frequency band for the whole sector overriding some of the Combo parameters.

Table 4-3: Private MIB Parameters - HSU (Sheet 34 of 37)

Name	OID	Type	Access	Description
winlink1000HbsAirTimeSlotAllocationBitmap			RW	Time Slots Allocation Bitmap for the entire sector (Hex Value).
winlink1000HbsAirDelayVsTputOpt			RW	Delay vs. Throughput optimization type: 1 = Delay sensitivity 2 = Throughput optimized
winlink1000HbsAirUCBPMinCS			RW	Minimal contention slot length used for UCBP algorithm (in ms.) between 5-20ms.
winlink1000HbsAirUCBPSharingPercentage			RW	Sharing percentage used by UCBP algorithm (15-75)
winlink1000HbsAirSingleHsuMode			RW	Single HSU mode: 1 = Not Applicable 2 = Single HSU 3 = Multiple HSUs
winlink1000HbsAirAtpcEnabled			RW	ATPC mode (off static or dynamic) status
winlink1000HbsAirAtpcTargetMCS			RW	targetRate for ATPC operation (100-309)
winlink1000HbsAirMinimalTimeBetweenAutoRealignment			RW	Minimal time in seconds between two Automatic Realignment Processes
winlink1000HbsBridgeAgingTime			RW	Timeout in seconds for aging.
winlink1000HbsBridgeVlanIngress			RW	HBS bridge Vlan ingress.
winlink1000HbsBridgeVlanEgress			RW	HBS bridge Vlan egress.
winlink1000HbsBridgeVlanFilterIn			RW	HBS bridge Vlan filter in.
winlink1000HbsBridgeVlanFilterOut			RW	HBS bridge Vlan filter out.
winlink1000HbsBridgeVlanDoubleTag			RW	HBS bridge Vlan double tag.
winlink1000HbsBridgeVlanDefaultId			RW	HBS bridge Vlan default id.
winlink1000HbsBridgeMembershipState			RW	HBS bridge membership state bitmap. Each bit represents Blocked/Opened relation (membership) between two HSUs. Blocked=0 (bit) Opened=1 (bit). This object holds the relation to 32 HSUs.
winlink1000HbsBridgeMembershipState2nd			RW	HBS bridge membership state bitmap. Each bit represents Blocked/Opened relation (membership) between HSU and LAN/Stack port of the HBS. Blocked=0 (bit) Opened=1 (bit). Only 2 bits are used.
winlink1000HbsBridgeFloodOverloadProtect			RW	Flood overload protection 1- Enabled 2- Disabled.
winlink1000HbsServiceCommandStr			RW	Ability to perform special command in the HBS. Format (string): Operation Index Session Param1 Param2 ....  ParamN The index and SessionID can be uniting to one parameter. On registered HSU it is HSU-ID and on Unregistered it is Session-ID.
winlink1000OduServiceVlanTbITag			RW	The VID to be used when adding TAG or adding Provider
winlink1000OduServiceVlanTbIPri			RW	The Vlan priority 0-7 to be used when adding TAG or adding Provider
winlink1000OduServiceVlanTbIMajorMode			RW	The Vlan major mode
winlink1000OduServiceVlanTbIEgressMode			RW	The Vlan mode in the Egress direction
winlink1000OduServiceVlanTbIIngressMode			RW	The Vlan mode in the Ingress direction



Table 4-3: Private MIB Parameters - HSU (Sheet 35 of 37)

Name	OID	Type	Access	Description
winlink1000OduServiceVlanTbIEgressFilter1			RW	VLAN Filter1 VID
winlink1000OduServiceVlanTbIEgressFilter2			RW	VLAN Filter2 VID
winlink1000OduServiceVlanTbIEgressFilter3			RW	VLAN Filter3 VID
winlink1000OduServiceVlanTbIEgressFilter4			RW	VLAN Filter4 VID
winlink1000OduServiceVlanTbUntagFilteredBitmap			RW	Represents (in bitmap) if to Untag a frame after it is filtered (Egress direction) [4 bits represent 4 filters].
winlink1000OduServiceVlanTbIProviderTPID			RW	Holds the Provider TPID that is used in all provider operations.
winlink1000OduServiceVlan2TbITag			RW	The VID 2 to be used when adding TAG or adding Provider
winlink1000OduServiceVlan2TbIPri			RW	The Vlan 2 priority 0-7 to be used when adding TAG or adding Provider
winlink1000OduServiceVlan2TbIMajorMode			RW	The Vlan 2 major mode
winlink1000OduServiceVlan2TbIEgressMode			RW	The Vlan 2 mode in the Egress direction
winlink1000OduServiceVlan2TbIIngressMode			RW	The Vlan 2 mode in the Ingress direction
winlink1000OduServiceVlan2TbIEgressFilter1			RW	VLAN 2 Filter1 VID
winlink1000OduServiceVlan2TbIEgressFilter2			RW	VLAN 2 Filter2 VID
winlink1000OduServiceVlan2TbIEgressFilter3			RW	VLAN 2 Filter3 VID
winlink1000OduServiceVlan2TbIEgressFilter4			RW	VLAN 2 Filter4 VID
winlink1000OduServiceVlan2TbUntagFilteredBitmap			RW	Represents (in bitmap) if to Untag a frame after it is filtered (Egress direction) [4 bits represent 4 filters].
winlink1000OduServiceVlan2TbIProviderTPID			RW	Holds the Provider TPID that is used in all provider operations.
winlink1000HbsServiceQoSMode			RW	Quality of Service mode.
winlink1000HbsServiceQoSvlanQGroupsStr			RW	Frame classification according to VLAN priority (all 4 groups separated by comma).
winlink1000HbsServiceQoSdiffservQGroupsStr			RW	Frame classification according to Diffserv (all 4 groups separated by comma).
winlink1000HbsServiceQoSConfAdminState			RW	QoS administrative state. The valid values are: enabled (1) disabled (2).
winlink1000HbsServiceQoSConfUpQueMir			RW	Private MIR for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfUpQueWeight			RW	Weight in percent for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfDownQueMir			RW	Private MIR for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSConfDownQueWeight			RW	Weight in percent for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSUpTtlMs			RW	TTL in mili second for each QoS group of the Uplink direction (4 values separated by comma).

Table 4-3: Private MIB Parameters - HSU (Sheet 36 of 37)

Name	OID	Type	Access	Description
winlink1000HbsServiceQoSDownTtlMs			RW	TTL in mili second for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceQoSUpStrict			RW	Strict QOS Boolean indication for each QOS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceQoSDownStrict			RW	Strict QOS Boolean indication for each QOS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceSynchronization1588TCEnable			RW	Enable/Disable PTP TC support. Value Mandatory Disabled is unchangeable.
winlink1000HbsServiceSynchronizationSyncEEnable			RW	Enable/Disable SyncE support. Value Mandatory Disabled is unchangeable.
winlink1000HbsServiceSynchronizationSyncESSMGeneration			RW	Enable/Disable SyncE SSM Generation.
winlink1000HbsServiceSynchronizationSyncEDesiredReferenceClock			RW	Desired Reference Clk HBS/HSU + Port ID.
winlink1000HbsServiceRadiusAuthorizationMode			RW	Enables/Disables Radius Authorization 1 - disable 2- enable
winlink1000HbsServiceRadiusUserName			RW	Radius client user Name
winlink1000HbsServiceRadiusPassword			RW	Radius client password
winlink1000HbsServiceRadiusServerIpAddr			RW	Radius server IP
winlink1000HbsServiceRadiusServerPort			RW	Radius server Port
winlink1000HbsServiceRadiusServerSecret			RW	Radius server Secret
winlink1000HbsServiceRadiusServerConnectivity			RW	Radius server connectivity status
winlink1000HbsServiceRadiusServerNumberOfRetries			RW	Radius server number of retries
winlink1000HbsServiceRadiusServerTimeout			RW	Radius server timeout
winlink1000HbsServiceCategoryIndex			RW	Service Category Index
winlink1000HbsServiceCategoryName			RW	Service Category Name
winlink1000HbsServiceCategoryULResources			RW	Service Category Uplink Resources
winlink1000HbsServiceCategoryDLResources			RW	Service Category Downlink Resources
winlink1000HbsServiceCategoryULMir			RW	Service Category Uplink MIR
winlink1000HbsServiceCategoryDLMir			RW	Service Category Downlink MIR
winlink1000HbsServiceCategoryQoSUpQueMir			RW	Private MIR for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSUpQueWeight			RW	Weight in percent for each QoS group of the Uplink direction (4 values separated by comma).

Table 4-3: Private MIB Parameters - HSU (Sheet 37 of 37)

Name	OID	Type	Access	Description
winlink1000HbsServiceCategoryQoSDownQueueMir			RW	Private MIR for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSDownQueueWeight			RW	Weight in percent for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSUpTtlMs			RW	TTL in mili second for each QoS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSDownTtlMs			RW	TTL in mili second for each QoS group of the Downlink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSUpStrict			RW	Strict QOS Boolean indication for each QOS group of the Uplink direction (4 values separated by comma).
winlink1000HbsServiceCategoryQoSDownStrict			RW	Strict QOS Boolean indication for each QOS group of the Downlink direction (4 values separated by comma).
winlink1000HbsPerfMonTxThresh1			RW	HBS performance monitor transmit power threshold.
winlink1000HbsPerfMonRxThresh1			RW	HBS performance monitor receive power threshold 1.
winlink1000HbsPerfMonRxThresh2			RW	HBS performance monitor receive power threshold 2.
winlink1000HbsPerfMonBBERThresh1			RW	HBS performance monitor BBER threshold.
winlink1000HbsPerfMonEstThroughputThreshKbps			RW	HBS performance monitor estimated throughput Threshold.
winlink1000HbsPerfMonHighTrafficThreshKbps			RW	HBS performance monitor high traffic threshold.
winlink1000HbsAdminInstallationConfirmationRequired			RW	Installation Confirmation required for Radius mode. 1- true 2- false
winlink1000HbsAdminRemoteTrapGenerationMode			RW	HBS generation of remote traps (1=Off 2=On)
winlink1000HsuAirReAlignmentOnStartupEnable			RW	Should HSU perform Realignment every syncloss.
winlink1000HsuAdminSiteSurveyMode			RW	This value indicates if site survey is activated or not activated.
winlink1000GeneralCookie			RW	Reserved for the Manager application provided with the product used for saving user preferences affecting ODU operation.
winlink1000GeneralTelnetSupport			RW	Enable/Disable Telnet protocol.
winlink1000GeneralWISupport			RW	Enable/Disable Web Interface protocol. Mandatory Disabled - No option to enable the feature. Mandatory Enabled - No option to disable the feature.
winlink1000GeneralSNMPSupport			RW	Enable/Disable SNMP protocols
winlink1000GeneralSSHSupport			RW	Enable/Disable SSH protocols
winlink1000OduPerfMonAirIntervalRSLThresh2Exceed			RO	Number of seconds Receive Signal Level exceeded the RSL2 threshold ACCESS read-only per interval.
winlink1000IduEthernetGbeSupported			RO	read-only

## 4.3 MIB Traps

### 4.3.1 General

Each ODU can be configured with up to 10 different trap destinations. When the link is operational, each ODU sends traps originating from both Site A and Site B.

The source IP address of the trap is the sending ODU. The trap originator can be identified by the trap Community string or by the trap description text.

Each trap contains a trap description and additional relevant information such as alarm severity, interface index, time stamp and additional parameters.

#### Trap Parameters

Table 4-4: MIB Traps (Sheet 1 of 8)

Name	ID	Severity	Description
trunkStateChanged	1	normal	Indicates a change in the state of one of the TDM trunks. Raised by both sides of the link. Contains 3 parameters: 1 - Description: TDM Interface %n - %x 2 - %n: Is the trunk number 3 - %x: Is the alarm type and can be one of the following: Normal AIS LOS Loopback
linkUp	2	normal	Indicates that the radio link is up. Contains a single parameter which is its description: 1 - Description: Radio Link - Sync on channel %n GHz. %n Is the channel frequency in GHz.
linkDown	3	critical	Indicates that the radio link is down. Contains a single parameter which is its description: 1 - Description: Radio Link - Out of Sync. The reason is: %s. %s Is the reason.
detectIDU	4	normal	Indicates that the IDU was detected. Raised by both sides of the link. Contains a single parameter which is its description: 1 - Description: IDU of Type %s was Detected. %s Is the type of the IDU.
disconnectIDU	5	major	Indicates that the IDU was disconnected. Raised by both sides of the link. Contains a single parameter which is its description: 1 - Description: IDU Disconnected.
mismatchIDU	6	major	Indicates a mismatch between the IDUs. Raised by the master only. Contains a single parameter which is its description: 1 - Description: IDUs Mismatch: One Side is %s and the Other is %s. %s Is the type of the IDU.
openedServices	7	normal	Indicates that services were opened. Raised by the master only. Contains 3 parameters: 1 - Description: %n2 out of %n1 Requested TDM Trunks have been Opened 2 - %n1: Is the requested number of TDM trunks 3 - %n2: Is the actual number of TDM trunks that were opened
closedServices	8	normal	Indicates that services were closed. Raised by the master only. Contains a single parameter which is its description: 1 - Description: TDM Service has been closed. The reason is: %s. %s Is the reason.
incompatibleODUs	9	critical	Indicates that the ODUs are incompatible. Contains a single parameter which is its description: 1 - Description: Incompatible ODUs.
incompatibleIDUs	10	major	Indicates that the IDUs are incompatible. Contains a single parameter which is its description: 1 - Description: Incompatible IDUs.
incompatibleOduldu	11	major	Indicates that the ODU and IDU are incompatible. Contains a single parameter which is its description: 1 - Description: The IDU could not be loaded. The reason is: %s. %s Is the incompatibility type.

Table 4-4: MIB Traps (Sheet 2 of 8)

Name	ID	Severity	Description
probingChannel	12	normal	Indicates that the ODU is monitoring radar activity. Contains a single parameter which is its description: 1 - Description: Monitoring for radar activity on channel %n GHz. %n is the channel frequency in GHz.
radarDetected	13	normal	Indicates that radar activity was detected. Contains a single parameter which is its description: 1 - Description: Radar activity was detected in %s on channel %n GHz. %s is the site name. %n is the channel frequency in GHz.
transmittingOnChannel	14	normal	Indicates that the ODU is transmitting on channel. Contains a single parameter which is its description: 1 - Description: Transmitting on channel %n GHz. %n is the channel frequency in GHz.
scanningChannels	15	normal	Indicates that the ODU is scanning channels. Contains a single parameter which is its description: 1 - Description: Channel scanning in progress.
incompatiblePartner	16	critical	Indicates that configuration problem was detected and that link installation is required in order to fix it. Contains a single parameter which is its description: 1 - Description: Configuration problem detected. Link installation required.
timeClockSet	17	normal	Indicates that the ODU time clock was set. Contains a single parameter which is its description: 1 - Description: The time was set to: %p. %p is the date and time.
configurationChanged	18	normal	Indicates that the ODU recovered from an error but there are configuration changes. Contains two parameters: 1 - Description: Configuration changed. Error code is: %n. 2 - %n number.
hssOpStateChangedToINU	19	normal	Indicates that the HSS operating state was changed to INU type. Contains a single parameter which is its description: 1 - Description: HSS operating state was changed to: INU.
hssOpStateChangedToHSM	20	normal	Indicates that the HSS operating state was changed to HSM type. Contains a single parameter which is its description: 1 - Description: HSS operating state was changed to: HSM.
hssOpStateChangedToHSC	21	normal	Indicates that the HSS operating state was changed to HSC type. Contains a single parameter which is its description: 1 - Description: HSS operating state was changed to: HSC_DT/ HSC_CT.
vlanModeActive	22	normal	Indicates to non-VLAN PC that after 2 minutes the system will support only VLAN tag on management interface. Contains a single parameter which is its description: 1 - Description: VLAN Mode is active. Non-VLAN traffic will be blocked in 2 minutes.
spectrumAnalysis	23	normal	Indicates that the ODU is in Spectrum Analysis mode. Contains a single parameter which is its description: 1 - Description: Spectrum analysis in progress.
hbsHsuDeregisteredOffline	24	normal	Indicates that a HSU was deregistered offline (out of link)
hbsHsuDeregisteredSuccessfully	25	normal	Indicates that a HSU was deregistered successfully
hbsHsuRegisteredSuccessfully	26	normal	Indicates that a HSU was registered successfully
hbsHsuRegistrationFailed	27	normal	Indicates that registration has failed
hbsHsuViolatedState	28	normal	Indicates (on the HBS side) that a HSU is in violated state
hsuViolatedState	29	normal	Indicates (on the HSU side) that the HSU is in violated state
hbsUnregisteredSynchronizedHsu	30	normal	Indicates an unregistered HSU has been synchronized.
hbsUnregisteredUnsynchronizedHsu	31	normal	Indicates an unregistered HSU lost synchronization.
cableQuality	32	normal	1Gbps rate is not supported due to bad line quality.
httpAuthentication	33	normal	HTTP Authentication Failure.
telnetAuthentication	34	normal	Telnet Authentication Failure.



Table 4-4: MIB Traps (Sheet 3 of 8)

Name	ID	Severity	Description
tdmServiceAlarm	100	major	Indicates that TDM Service is in alarm state. Contains a single parameter which is its description: 1 - Description: TDM Service - Alarm.
ethServiceClosed	101	major	Indicates that Ethernet Service is closed. Contains a single parameter which is its description: 1 - Description: Ethernet Service is closed.
ethServiceNotPermitted	102	major	Indicates that Ethernet Service is not permitted. Contains a single parameter which is its description: 1 - Description: A valid IDU could not be detected at %s. Please check your configuration. %s - Is the Local Site name or Remote Site name or both sides of the Link.
encryptionAlarm	103	major	Indicates an encryption key mismatch. Contains a single parameter which is its description: 1 - Description: Encryption Status - Failed. No Services are available.
changeLinkPasswordAlarm	104	major	Indicates that a failure has occurred while attempting to change the Link Password. Contains a single parameter which is its description: 1 - Description: Failed to change the Link Password at/on: %s. %s - Is the Local Site name or Remote Site name or both sides of the Link.
externalAlarmInPort1Alarm	105	major	The trap is sent every time an alarm occurs in the External Alarm Input of port #1. Contains a single parameter which is its description: 1 - Description: External Alarm 1 - <User Text> - Alarm.
externalAlarmInPort2Alarm	106	major	The trap is sent every time an alarm occurs in the External Alarm Input of port #2. Contains a single parameter which is its description: 1 - Description: External Alarm 2 - <User Text> - Alarm.
bitFailedAlarm	107	major	The trap is sent if there is no way to recover from the situation. Contains two parameters: 1 - Description: ODU power up built in test failed. Error code is: %n 2 - %n number
wrongConfigurationLoadedAlarm	108	major	The trap is sent if there is a way to recover from the situation. Contains two parameters: 1 - Description: Wrong configuration loaded. Error code is: %n 2 - %n number
lanPort1DisconnectedAlarm	109	major	Indicates the LAN port 1 status changed to disconnected. Contains a single parameter which is its description: 1 - Description: LAN port 1 status changed to disconnected.
lanPort2DisconnectedAlarm	110	major	Indicates the LAN port 2 status changed to disconnected. Contains a single parameter which is its description: 1 - Description: LAN port 2 status changed to disconnected.
mngPortDisconnectedAlarm	111	major	Indicates the management port status changed to disconnected. Contains a single parameter which is its description: 1 - Description: Management port status changed to disconnected.
externalAlarmInPort3Alarm	112	major	The trap is sent every time an alarm occurs in the External Alarm Input of port #3. Contains a single parameter which is its description: 1 - Description: External Alarm 3 - <User Text> - Alarm.
externalAlarmInPort4Alarm	113	major	The trap is sent every time an alarm occurs in the External Alarm Input of port #4. Contains a single parameter which is its description: 1 - Description: External Alarm 4 - <User Text> - Alarm.
swVersionsMismatchFullCompatibilityAlarm	114	warning	The trap is sent if SW versions mismatch with full link functionality. Contains a single parameter which is its description: 1 - Description: Software versions mismatch - full link functionality
swVersionsMismatchRestrictedCompatibilityAlarm	115	minor	The trap is sent if SW versions mismatch with restricted link functionality. Contains a single parameter which is its description: 1 - Description: Software versions mismatch - restricted link functionality

Table 4-4: MIB Traps (Sheet 4 of 8)

Name	ID	Severity	Description
swVersionsMismatchSoftwareUpgradeRequired	116	major	The trap is sent if SW versions mismatch and SW upgrade is required. Contains a single parameter which is its description: 1 - Description: Software versions mismatch - Software upgrade required
swVersionsIncompatible	117	critical	The trap is sent if SW versions are incompatible. Contains a single parameter which is its description: 1 - Description: SW Versions incompatible
hssMultipleSourcesDetectedAlarm	118	major	Indicates that multiple sync pulse sources were detected. Contains a single parameter which is its description: 1 - Description: HSS multiple sync sources were detected.
hssSyncToProperSourceStoppedAlarm	119	major	Indicates that synchronization to a proper sync pulse source was stopped. Contains a single parameter which is its description: 1 - Description: HSS sync pulse - Down. The reason is: %s. %s - Is the reason for the sync down.
hssSyncPulseDetectedAlarm	120	major	Indicates that HSS additional sync pulse was detected. Contains a single parameter which is its description: 1 - Description: HSS additional sync pulse was detected.
tdmBackupAlarm	121	major	Indicates that the TDM backup link was activated. Contains a single parameter which is its description: 1 - Description: TDM backup alarm - backup link was activated.
linkLockUnauthorizedRemoteODU	122	major	Indicates that the remote ODU is unauthorized. Contains a single parameter which is its description: 1 - Description: Unauthorized remote ODU connection rejected.
linkLockUnauthorizedODU	123	major	Indicates that the ODU is unauthorized. Contains a single parameter which is its description: 1 - Description: Unauthorized ODU connection rejected.
hotStandbyAlarm	124	major	Indicates that the hot standby secondary link was activated. Contains a single parameter which is its description: 1 - Description: Secondary Link Is Active.
sfpInsertion	126	normal	Indicates that a device was inserted to SFP Port
sfpPort1DisconnectedAlarm	127	major	Indicates the SFP port 1 status changed to disconnected. Contains a single parameter which is its description: 1 - Description: SFP port 1 status changed to disconnected.
ringRplStateActiveAlarm	128	major	RPL state changed to Active.
desiredRatioCanNotBeAppliedAlarm	129	normal	Indicates Desired UL/DL RATIO Can Not Be Applied.
cbwMismatch	130	major	Indicates that a Channel Bandwidth mismatch was detected. Contains two parameters: 1 - Description: Channel Bandwidth Mismatch: one side is %n0 MHz and the other is %n1 MHz. %n0 is the local Channel Bandwidth value in MHz. %n1 is the remote Channel Bandwidth value in MHz.
gpsNotSynchronized	131	major	Indicates that the GPS is not synchronized with satellites. Pulses are self generated.
pdTooHighDueCbwLimitations	132	major	Indicates that link cannot be established because link range is too large for channel bandwidth.
hbsEncryptionAlarm	133	major	Indicates an encryption key mismatch. Contains a single parameter which is its description including the HSU's name
hbsEhServiceClosedToHsu	134	major	Indicates an encryption key mismatch. Contains a single parameter which is its description including the HSU's name
hbsUnsynchronizedHsuAlarm	135	warning	Indicates a registered HSU lost synchronization.
hbsInactiveHbsAlarm	136	major	Indicates HBS is InActive.
incompatibleHsu	137	critical	Indicates that the HSU is not compatible to HBS. Contains a single parameter which is its description: 1 - Description: Incompatible ODUs.
hsuUnsupportedBeacon	138	warning	Indicates an unsupported beacon has arrived at HSU
lanPortDisconnectedAlarm	139	major	Indicates the LAN port status changed to disconnected. Contains a single parameter, which is its description: 1 - Description: LAN port status changed to disconnected.

Table 4-4: MIB Traps (Sheet 5 of 8)

Name	ID	Severity	Description
poePortDisconnectedAlarm	140	major	Indicates the POE port status changed to disconnected. Contains a single parameter, which is its description: 1 - Description: POE port status changed to disconnected.
poePowerConsumptionAlarm	141	major	Indicates the POE Power Consumption is above allowed maximum. Contains a single parameter, which is its description: 1 - Description: POE consumption above allowed maximum. port closed.
hobupFaultyStateAlarm	149	major	This Alarm will indicate that the Hot Backup module is in faulty state. 1 - Description: Hot Backup fault detected: %s unit. %s - Primary Or Secondary Unit
gpsOverCurrentAlarm	150	major	Indicates the GPS Antenna current consumption is above allowed maximum. Contains a single parameter, which is its description: 1 - Description: GPS Antenna current consumption above allowed maximum. GPS closed.
gpsCommunicationFailureAlarm	151	major	Indicates the GPS data isn't received. Contains a single parameter, which is its description: 1 - Description: GPS Communication failure.
temperatureThresholdAlarm	152	major	Indicates the board temperature is above allowed maximum. Contains a single parameter, which is its description: 1 - Description: GPS Antenna current consumption above allowed maximum. GPS closed.
localRouterDiscoveryStatus	153	major	This Alarm will indicate that we have no connection with Track side router. 1 - Description: MacLearningUpdate detected disconnection with Track side router %s %s - Default gateway IP
TrackRouterDiscoveryStatus	154	major	This Alarm will indicate that we have no connection with Track side router. 1 - Description: MacLearningUpdate detected disconnection with Track side router %s %s - Default gateway IP
btsTargetUnreachable	156	major	This Alarm will indicate that we have no connection with Bts desired target. 1 - Description: TNC detected disconnection with the BTS target %s Broadband Wireless %s - Default gateway IP
tdmServiceClear	200	major	Indicates that TDM Service fault is cleared. Contains a single parameter which is its description: 1 - Description: TDM Service - Normal.
ethServiceOpened	201	normal	Indicates that Ethernet Service has been opened. Contains a single parameter which is its description: 1 - Description: Ethernet Service has been opened.
encryptionClear	203	normal	Indicates that encryption is OK. Contains a single parameter which is its description: 1 - Description: Encryption Status - Normal.
changeLinkPasswordClear	204	normal	Indicates that the Link Password was changed successfully. Contains a single parameter which is its description: 1 - Description: Link Password has been changed at/on: %s. %s - Is the Local Site name or Remote Site name or both sides of the Link.
externalAlarmInPort1Clear	205	normal	This Trap is sent every time an External Alarm Input fault of port # 1 is cleared. Contains a single parameter which is its description: 1 - Description: External Alarm 1 - <User Text> - Alarm Cleared.
externalAlarmInPort2Clear	206	normal	This Trap is sent every time an External Alarm Input fault of port # 2 is cleared. Contains a single parameter which is its description: 1 - Description: External Alarm 2 - <User Text> - Alarm Cleared.

Table 4-4: MIB Traps (Sheet 6 of 8)

Name	ID	Severity	Description
lanPort1Clear	209	normal	Indicates the LAN port 1 status changed to connected. Contains two parameters: 1 - Description: LAN port 1 status changed to connected - %s 2 - %s Is the Eth. mode (speed & duplex)
lanPort2Clear	210	normal	Indicates the LAN port 2 status changed to connected. Contains two parameters: 1 - Description: LAN port 2 status changed to connected - %s. 2 - %s Is the Eth. mode (speed & duplex).
mngPortClear	211	normal	Indicates the management port status changed to connected. Contains two parameters: 1 - Description: Management port status changed to connected - %s 2 - %s Is the Eth. mode (speed & duplex)
externalAlarmInPort3Clear	212	normal	This Trap is sent every time an External Alarm Input fault of port # 3 is cleared. Contains a single parameter which is its description: 1 - Description: External Alarm 3 - <User Text> - Alarm Cleared.
externalAlarmInPort4Clear	213	normal	This Trap is sent every time an External Alarm Input fault of port # 4 is cleared. Contains a single parameter which is its description: 1 - Description: External Alarm 4 - <User Text> - Alarm Cleared.
swVersionsMatchFullCompatibilityClear	214	normal	The trap is sent if SW versions match. Contains a single parameter which is its description: 1 - Description: Software Versions compatible
swVersionsMatchRestrictedCompatibilityClear	215	normal	The trap is sent if SW versions match and link functionality is not restricted. Contains a single parameter which is its description: 1 - Description: Software Versions compatible
swVersionsMatchSoftwareUpgradeRequiredClear	216	normal	The trap is sent if SW versions match and SW upgrade is successful. Contains a single parameter which is its description: 1 - Description: Software Versions compatible
swVersionsCompatibleClear	217	normal	The trap is sent if SW versions compatible Contains a single parameter which is its description: 1 - Description: Software Versions compatible
hssMultipleSourcesDisappearedClear	218	normal	Indicates that multiple sync pulse sources disappeared. Contains a single parameter which is its description: 1 - Description: HSS multiple sync pulse sources disappeared.
hssSyncToProperSourceAchievedClear	219	normal	Indicates that synchronization to a proper Sync source was achieved. Contains a single parameter which is its description: 1 - Description: HSS sync pulse - Up.
hssSyncPulseDisappearedClear	220	normal	Indicates that HSS additional sync pulse disappeared. Contains a single parameter which is its description: 1 - Description: HSS additional sync pulse was disappeared.
tdmBackupClear	221	normal	Indicates that the TDM main link was activated. Contains a single parameter which is its description: 1 - Description: TDM main link was activated.
linkLockAuthorizedRemoteODU	222	normal	Indicates that the remote ODU is authorized. Contains a single parameter which is its description: 1 - Description: Authorized remote ODU connection accepted.
linkLockAuthorizedODU	223	normal	Indicates that the ODU is authorized. Contains a single parameter which is its description: 1 - Description: Authorized ODU connection permitted.
linkAuthenticationDisabled	224	normal	Indicates that the Link Lock is disabled. Contains a single parameter which is its description: 1 - Description: Link Authentication has been disabled.
hotStandbyClear	225	normal	Indicates that the Primary Link Was Activated. Contains a single parameter which is its description: 1 - Description: Primary Link Is Active.
sfpExtraction	226	normal	Indicates that a device was extracted from SFP Port

Table 4-4: MIB Traps (Sheet 7 of 8)

Name	ID	Severity	Description
sfpPort1Clear	227	normal	Indicates the SFP port 1 status changed to connected. Contains two parameters: 1 - Description: SFP port 1 status changed to connected - %s 2 - %s Is the Eth. mode (speed & duplex)
compatibleIdus	228	normal	Indicates that the ODU has identified compatible Idus on both sides of the link.
desiredRatioCanNotBeAppliedClear	229	normal	Indicates Current UL/DL Ratio Is Equal To Desired Ratio.
cbwMatch	230	normal	Indicates that a Channel Bandwidth match was detected. Contains a single parameter which is its description: 1 - Channel Bandwidth value in MHz.
switchCbwAndChannel	231	normal	Indicates that the system is switching Channel Bandwidth and channel frequency. Contains two parameters: 1 - Switching to Channel Bandwidth %n0 MHz and to channel %n1 GHz.
ringRplStateIdle	232	normal	RPL state changed to Idle.
ringEthServiceStatus	233	normal	Indicates Ethernet service's state - blocked \ unblocked. Contains a single parameter: 1 - Description: Ethernet's state (blocked \ unblocked)
ringFirstRpmReceived	234	normal	Ring application: in non-RPL link indicates first from a specific RPL was received. Contains a single parameter: 1 - Description: RPM's VLAN ID
ringEthernetSrviceUnblockedTO	235	normal	Ring application: in non-RPL link Ethernet service is unblocked due to RPM timeout.
gpsSynchronized	236	normal	Indicates that the GPS is synchronized with satellites.
hbsEncryptionClear	237	normal	Indicates that encryption is OK. Contains a single parameter which is its description including the HSU's name
hbsEhServiceOpenedToHsu	238	normal	Indicates that encryption is OK. Contains a single parameter which is its description including the HSU's name
hbsSynchronizedHsuAlarm	239	normal	Indicates a registered HSU is synchronized.
hbsActiveHbs	240	normal	Indicates when HBS has been activated.
switchCBW	241	normal	Switching Channel Bandwidth.
changeRatio	242	normal	HBS Tx ratio has changed.
lanPortClear	243	normal	Indicates the LAN port status changed to connected. Contains two parameters: 1 - Description: LAN port status changed to connected - %s 2 - %s Is the Eth. mode (speed & duplex)
poePortClear	244	normal	Indicates the POE port status changed to connected. Contains two parameters: 1 - Description: POE port status changed to connected - %s 2 - %s Is the Eth. mode (speed & duplex)
poePowerConsumptionClear	245	normal	Indicates the POE power consumption is valid. Contains two parameters: 1 - Description: POE consumption within limits. port is opened. 2 - %s Is the Eth. mode (speed & duplex)
incompatibleHbsHsu	246	normal	Incompatible HBS/HSU software versions - no service.
mobilityLinkOff	247	normal	Mobility - Link cannot be established due to: 1 - The HBS does not support Mobility 2 - Lack of resources in the HBS for HSU level
enterLocalConnection	248	normal	Entering Local Connection (Broadcast) Mode.
hobupActiveStateFaultyClear	249	normal	This clear alarm will indicate that the Hot Backup unit is in active state. Contains a single parameter, which is its description: 1 - Description: Hot Backup %s unit activated. %s - Primary Or Secondary Unit
hobupStandbyState	250	normal	Contains a single parameter, which is its description: 1 - Description: Hot Backup in Standby state: %s unit. %s - Primary Or Secondary Unit
gpsOverCurrentClear	251	normal	Indicates the GPS Antenna current consumption is valid.



Table 4-4: MIB Traps (Sheet 8 of 8)

Name	ID	Severity	Description
temperatureThresholdClear	252	normal	Indicates the board temperature is valid.
localRouterDiscoverySucceed	253	normal	Indicated the we succeeded to discover train router in ip %s MAC address %s %s Train IP %s Train MAC Address
TrackRouterDiscoverySucceed	254	normal	Indicated the we succeeded to discover track router in ip %s MAC address %s %s Train IP %s Train MAC Address
qosVersion2StrictMismatch	255	normal	CPE doesn't support strict QOS configuration.
qosVersion2TtlMismatch	256	normal	CPE doesn't support TTL configuration.
btsTargetIsReachable	257	normal	Indicates that we succeeded to establish connection with the Bts desired target (%s) %s Target IP
tcNotSupportedByHSU	258	normal	Transparent Clock (Sync E) feature not supported by HSU
syncEPortHOStateChange	259	normal	Enter/leave HO (hold-over) state of SyncE port
syncEPortFailureStateChange	260	normal	Enter/leave Failure state of SyncE port.
btsCpeUpdateServiceFailed	261	normal	HBS was not able to update the service definitions or category of the HSU.
btsCpeUpdateServiceSucceed	262	normal	HBS was able to update the service definitions or category of the HSU.
radiusServerNoResponse	263	normal	No response received from RADIUS server.
noRadiusServerRespond	264	normal	No RADIUS server is connected.
radiusServerRespondedSuccessfully	265	normal	Response received from RADIUS server.
bsaAlignmentStarted	266	normal	Indicates the beginning of Alignment Process
bsaAlignmentFinished	267	normal	Indicates the completion of Alignment Process
bsaAlignmentTriggered	268	normal	Indicates the triggering of Alignment Process due to exceeding thresholds



# RADWIN Broadband Wireless Products

## MIB Reference

Cat.No. DO0168170/0.3

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