IP10/IP10-G I6.8

MIB Reference

DOC-00015446 (Rev A)

19 October 2011

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Any changes or modifications of equipment not expressly approved by the manufacturer could void the user's authority to operate the equipment and the warranty for such equipment.

Revision History

Rev	Date	Author	Description	Approved by	Date
1.0	23 Oct 2011	Mika Yehezkeli	Updated with I6.8 features		

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1. About this guide

The Ceragon Networks® Management Information Base (MIB) is a set of properties within a managed device. These properties can be accessed via a network. Every managed device keeps a database of values for each of the definitions written in the MIB, which can be used by management applications to monitor and control functions via either SNMP-V1 or SNMP-V3 protocols.

The MIB is divided into Standard and private MIBs. The private MIB is owned by Ceragon Networks and supplements the Standard MIB.

This guide describes the Private Ceragon MIB for all IP10 platforms up to and including the I6.7 release and the parts of the standard MIBs that Ceragon supports.

1.1 What you should know

This document assumes that you are comfortable with using SNMP v1, v2 and v3.

1.2 Target audience

This document is intended to be used by EMS/NMS developers. The purpose of this document is to provide information about how to use the Ceragon private MIB to manage network elements.

1.3 Related documents

- CeraWeb user guide
- IP10 product description
- CLI reference

1.4 Acronyms

The following table lists the acronyms that are used throughout this document.

Acronyms

ATPC	Automatic Transmit Power Control
BBE	Background Block Errors
BER	Bit Error Rate
CLLI	Common Language Location Identifier
CoS	Class of Service
IDF	Invalid Data Flag
MIB	Management Information Base
MRMC	Multi-Rate Multi-Constellation
NE	Network Element
PM	Performance Monitoring
RSL	Received Signal Level
TDM	Time Division Multiplexing
TSL	Transmitted Signal Level
XPI	Cross Polar Interference

2. Introduction

2.1 About the IP10-G slots

IP10-G is a nodal solution where each IP10-G slot answers the MIB itself.

2.1.1 Accessing the IP10-G slot units

In general the community string in (V.1) is used to access to the main shelf unit. To access,retrieve, and set information from extension units, use either Public_%slot or Private_%slot as the community strings. For SNMP v.3, use: Shelf_%slot.

Accessing the slot units via SNMPv1

	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6
Read Community	public_1	public_2	public_3	public_4	public_5	public_6
Write community	private_1	private_2	private_3	private_4	private_5	Private_6
Read Community	public_12 (in case of 1+1 protection between slots 1,2)		public_34 (in case of 1+1 protection between slots 3,4)		public_56 (in case of 1+1 protection between slots 5,6)	
Write community	private_12 (in case of 1+1 protection between slots 1,2)		private_34 (in case of 1+1 protection between slots 3,4)		private_56 (in case of 1+1 protection between slots 5,6)	

Accessing the slot units via SNMPv3

	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	Slot 6
Context	shelf_1	shelf _2	shelf _3	shelf _4	shelf _5	shelf _6
Context	shelf_12 (in case of 1+1 protection between slots 1,2)		shelf_34 (in case of 1+1 protection between slots 3,4)		shelf_56 (in case of 1+1 protection between slots 5,6)	

2.1.2 SNMP support in the extension slots

Similar to the CLI and web support, extension units do not support the entire private MIB. These actions can onlybe accessed from the main unit.

- SW management
- Configuration management
- Management and networking (subnet mask)
- Shelf management table
- Trail management

3. Private MIB reference

3.1 genEquipUnit

Parameter	Description	Syntax	Access	OID
genEquip Unit	Commands and parameters to configure the IDU.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1
genEquip Unit Info	Configures the IDU's system information.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.1
genEquip Unit Inventory	Indicates the serial and part numbers of the IDU.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.2
genEquip Unit LicenseInfo	Configures the unit's license information.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.3
genEquip Unit ExternalAlarms	Configures external alarm input and output.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.4.1
genEquip Unit Shelf	Shelf-wide configuration commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.5
genEquip Protection	Configures protection mode for a specific card.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.6
genEquip Diversity	Configures the IDU's diversity scheme.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.7

3.1.1 genEquipUnitInfo

Parameter	Description	Syntax	Access	OID
genEquip LastCfgTimeStamp	Configuration change counter, increases by one on every configuration change.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.1.1
genEquip RealTimeandDate	Current date and time.	Octet string Size: 8	Read-write	1.3.6.1.4.1.2281.10.1.1.2

Parameter	Description	Syntax	Access	OID
genEquip PMGenTime	Time that the performance monitor file was generated.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.1.3
genEquip InvGenTime	Time that the Inventory file was generated.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.1.4
genEquip Operation	Enables ability to perform hardware reset to the indoor unit.	Integer noAction [0] idcHwReset [1]	Read-write	1.3.6.1.4.1.2281.10.1.1.5
genEquip MIBVersion	Current MIB version.	Display string	Read-only	1.3.6.1.4.1.2281.10.1.1.6
genEquip Unit CLLI	This value represents a general purpose CLLI (Common Language Location Identifier) text field. The CLLI field is attached to traps generated from this NE.	Display string Size: [0-255]	Read-write	1.3.6.1.4.1.2281.10.1.1.7
genEquip Unit MeasurementSystem	Current measurement ?system.	Integer Metric [0] Imperial [1]	Read-write	1.3.6.1.4.1.2281.10.1.1.8
genEquip Unit IduTemperature	Indicates the IDU temperature according to the chosen measurement system.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.1.9
genEquip Unit IduVoltageInput	Voltage input of the IP10-G IDU.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.1.10
genEquip UnitInfo Time	Configures daylight saving time and network time protocol.	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.1.11

Parameter	Description	Syntax	Access	OID
genEquip Unit IduPowerSupply1 AlarmAdmin	Enable or disable the alarm for of one of the power supply units. This parameter is relevant only for IDU with more than one power supply units.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.1.1.12
genEquip Unit IduPowerSupply2 AlarmAdmin	Enable or disable the alarm for of one of the power supply units. This parameter is relevant only for IDU with more than one power supply units.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.22 81.10.1.1.12

3.1.1.1 genEquipUnitInfoTime

Parameter	Description	Syntax	Access	OID
genEquip Unit GMTHours	Time zone difference in hours from GMT.	Integer [-12...13]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.1
genEquip Unit GMTMins	Time zone difference in minutes from GMT.	Integer [0-59]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.2
genEquip UnitInfo NTP	Configures Network Time Protocol (NTP).	Subfolder	N/A	1.3.6.1.4.1.2281.10.1.1.11.6
genEquip Unit DaylightSavingTime StartMonth	Configures the start month of daylight saving time.	Integer [1-12]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.7
genEquip Unit DaylightSavingTime StartDay	Configures the start day of daylight saving time.	Integer [1-31]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.8
genEquip Unit DaylightSavingTime EndMonth	Configures the end month of daylight saving time.	Integer [1-12]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.9

Parameter	Description	Syntax	Access	OID
genEquip Unit DaylightSavingTime EndDay	Configures the end day of daylight saving time.	Integer [1-31]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.10
genEquip Unit DaylightSavingTime Offset	Configures daylight saving offset hours. For a value different then 0, at the starting date of daylight saving time the time will jump forward in this value. At the end date of the daylight saving time, the time will jump backwards in this value.	Integer [1-23]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.11

genEquipUnitInfoNTP

Parameter	Description	Syntax	Access	OID
genEquip UnitInfo NTP Admin	State of the network time protocol administrator.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.1.1.11.6.1
genEquip UnitInfo NTP ServerIP	IP address for the network time protocol server.	IP address	Read-write	1.3.6.1.4.1.2281.10.1.1.11.6.2
genEquip UnitInfo NTP Status	Status of the network time protocol service.	Integer Down [0] Up [0]	Read-only	1.3.6.1.4.1.2281.10.1.1.11.6.3

Parameter	Description	Syntax	Access	OID
genEquip UnitInfo NTP Sync	Returns the IP address of the NTP server with which the system is currently synchronized.	Display string Returned strings: The IP address of the reference NTP server, according to IPv4/v6 format. LOCAL if synchronized on local clock. N/A if not synchronized. Valid only when admin is disabled.	Read-only	1.3.6.1.4.1.2281.10.1.1.11.6.4
genEquip UnitInfo NTP PollInterval	Polling interval of the network time protocol in minutes.	Integer [64-1024]	Read-only	1.3.6.1.4.1.2281.10.1.1.11.6.5

3.1.2 genEquipUnitInventory

Parameter	Description	Syntax	Access	OID
genEquip Unit IDU SerialNumber	Serial number of the IP10G IDU hardware unit.	Display string	Read-only	1.3.6.1.4.1.2281.10.1.2.1
genEquip IDU PartNumber	Part number of the IP10G IDU hardware unit.	Display string	Read-only	1.3.6.1.4.1.2281.10.1.2.2

3.1.3 genEquipUniLicenseInfo

Parameter	Description	Syntax	Access	OID
genEquip Unit LicenseType	Unit license type.	Integer Default [0] Normal [1] Demo [2]	Read-only	1.3.6.1.4.1.2281.10.1.3.1
genEquip Unit LicenseCode	Configures user license code that determines the NE license rights.	Display string	Read-write	1.3.6.1.4.1.2281.10.1.3.2
genEquip Unit ACMLicense	Allows use of dynamic ACM radio scripts.	Integer Not allowed [0] Allowed [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.3

Parameter	Description	Syntax	Access	OID
genEquip Unit SwitchAppLicense	Allows use of Managed and Metro switch Ethernet applications.	Integer Single-pipe [0] Switch [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.4
genEquip Unit CapacityLicense	This license allows users to limit the available radio capacity.	Integer [10-510]	Read-only	1.3.6.1.4.1.2281.10.1.3.5
genEquip Unit License DemoAdmin	Enables or disables the demo license. This is a temporary license that allows access to maximum capacity and all features.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.1.3.6
genEquip Unit License DemoTimer	Number of remaining hours for demo mode. The demo license is limited to 60 days. An event will be raised 10 days before expiration.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.3.7
genEquip Unit License SyncU	Indicates whether the synchronization unit license is allowed. This license allows configuration of external source as a clock source for synchronous Ethernet output, provided that the IDU's hardware supports synchronization). If this license is not installed, the Ethernet clock source can only be a local (internal) clock.	Integer Not-allowed [0] Allowed [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.8

Parameter	Description	Syntax	Access	OID
genEquip Unit License NetworkResiliency	Indicates whether the network resiliency license is allowed. This license allows configuration of features that make use of loop network topologies such as ring RSTP and SNCP (TDM trails protection). Note that for systems in which these features were enabled in previous versions, the features will be allowed even if no resiliency alarm is purchased.	Integer Not-allowed [0] Allowed [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.9
genEquip Unit License TDMCapacity	Limits the bandwidth of the radio script that can be loaded. Applies only if the TDM-only license is disabled.	Integer Not-allowed [0] Allowed [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.10
genEquip Unit License TDMCapacityValue	Indicates the number of TDM trails per radio allowed by the current license. The TDM capacity value is relevant only if the TDM Capacity license is enabled.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.3.11

Parameter	Description	Syntax	Access	OID
genEquip Unit License PerUsage	Indicates whether the per-usage license is allowed. This license allows unlimited usage of all features in the system. Users are billed according to actual use. The system alerts users when a chargeable feature is activated.	Integer Not-allowed [0] Allowed [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.12
genEquip Unit License AsymScripts	Indicates whether asymmetrical scripts are licensed for use. This license helps to optimize bandwidth usage, by diverting available capacity from the uplink to the downlink.	Integer Not-allowed [0] Allowed [1]	Read-only	1.3.6.1.4.1.2281.10.1.3.13

3.1.4 genEquipUnitExternalAlarms

Parameter	Description	Syntax	Access	OID
genEquip Unit AlarmInput Table	Configure alarm description and severity. Five input alarms are supported.	Sequence of genEquip Unit AlarmInput Entry	N/A	1.3.6.1.4.1.2281.10.1.4.1.1
genEquip Unit AlarmOutput Table	Alarm status and output.	Sequence of genEquip Unit AlarmOutput Entry	N/A	1.3.6.1.4.1.2281.10.1.4.2.1

3.1.4.1 genEquipUnitAlarmInputTable

Table index: genEquipUnitAlarmInputCounter

Parameter	Description	Syntax	Access	OID
genEquip Unit AlarmInput Entry	External alarm input table entry.	Sequence of genEquip Unit AlarmInput Entry	N/A	1.3.6.1.4.1.2281.10.1.4.1.1.1
genEquip Unit AlarmInput Counter	Index of an external alarm input table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.4.1.1.1.1
genEquip Unit AlarmInput Admin	Enables or disables the external alarm input table.	Integer Disable [0] Enable [1]	Read-write	1.3.6.1.4.1.2281.10.1.4.1.1.1.2
genEquip Unit AlarmInput Text	Configures the input alarm description.	Display string Size: [0-99]	Read-write	1.3.6.1.4.1.2281.10.1.4.1.1.1.3
genEquip Unit AlarmInput Severity	Configures the external alarm input severity.	Integer Indeterminate [0] Critical [1] Major [2] Minor [3] Warning [4]	Read-write	1.3.6.1.4.1.2281.10.1.4.1.1.1.4

3.1.4.2 genEquipUnitAlarmOutputTable

Table index: genEquipUnitAlarmOutputCounter

Parameter	Description	Syntax	Access	OID
genEquip Unit AlarmOutput Entry	External output alarm table entry.	Sequence of genEquip Unit AlarmOutput Entry	N/A	1.3.6.1.4.1.2281.10.1.4.2.1.1
genEquip Unit AlarmOutput Counter	Index of an external output alarm table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.4.2.1.1.1

Parameter	Description	Syntax	Access	OID
genEquip Unit AlarmOutput Admin	Enables / disables the external output alarm. When enabled: If no alarms are raised, the normally open (N.O.) contact will be opened, while the normally closed (N.C.) contact will be connected to the COM contact. When an alarm is raised, or the system power is OFF, the N.O. will be connected to the COM contact, while the N.C. contact will remain opened. When the Test option is selected, the dry contacts behave as an alarm is raised in the system.	Integer Disable [0] Enable [1] Test [2]	Read-write	1.3.6.1.4.1.2281.10.1.4.2.1.1.2
genEquip Unit AlarmOutput Status	Indicates the current status of the external output alarm table.	Integer Off [0] On [1] On-test [2]	Read-only	1.3.6.1.4.1.2281.10.1.4.2.1.1.3
genEquip Unit AlarmOutput Group	Configures the external output alarm groups.	Integer Communication [1] Quality of Service [2] Processing [3] Equipment [4] Environmental [5] All groups [6]	Read-write	1.3.6.1.4.1.2281.10.1.4.2.1.1.4

3.1.5 genEquipUnitShelf

Parameter	Description	Syntax	Access	OID
genEquip Unit Shelf Installation	Indicates the NE installation type: standalone or module/card within a chassis.	Integer Stand alone [0] Module within a chassis [1]	Read-only	1.3.6.1.4.1.2281.10.1.5.1
genEquip Unit Shelf ModuleRole	This value indicates the NE module role: main unit or extension.	Integer Main [0] Extension [1]	Read-only	1.3.6.1.4.1.2281.10.1.5.2
genEquip Unit Shelf SlotLabel	Slot label is a user defined description for the module in the slot.	Display string Size: [0-255]	Read-write	1.3.6.1.4.1.2281.10.1.5.3
genEquip Unit Shelf ArchivesOperation Status	Shelf-wide configuration archive operation status. Used when creating or restoring a unit information archive.	Integer Ready [0] In progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.1.5.4
genEquip Unit Shelf ShelfManagement Table	Shelf-wide configuration management. Relevant only for main units.	Sequence of genEquip Unit Shelf Management Entry	N/A	1.3.6.1.4.1.2281.10.1.5.5
genEquip Unit Shelf Reset	Allows resetting the entire shelf.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.5.6
genEquip Unit Shelf AllODU Admin	Enable / disable configuring the unit as an all outdoor unit.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.1.5.7

3.1.5.1 genEquipUnitShelfManagementTable

Table index: genEquipUnitShelfManagementSlotID

Parameter	Description	Syntax	Access	OID
genEquip Unit ShelfManagement	Shelf management table entry. Relevant only for	Sequence of genEquip Unit	N/A	1.3.6.1.4.1.2281.10.1.5.5.1

Entry	main units.	Shelf Management Entry		
genEquip Unit ShelfManagement Slot	Indicates the slot number of a unit in the shelf. Relevant only for main units.	Integer Standalone [0] Slot1 [1] Slot2 [2] Slot3 [3] Slot4 [4] Slot5 [5] Slot6 [6]	Read-only	1.3.6.1.4.1.2281.10.1.5.5.1.1
genEquip Unit ShelfManagement SlotPopulation	Indicates if the slot is occupied or not. Relevant only for main units.	Integer Not-present [0] Present [1]	Read-only	1.3.6.1.4.1.2281.10.1.5.5.1.2
genEquip Unit ShelfManagement Communication Status	Indicates if the communication status of the slot. Relevant only for main units.	Integer Communication Down [0] Communication Up [1]	Read-only	1.3.6.1.4.1.2281.10.1.5.5.1.3
genEquip Unit ShelfManagement Slot MostSevereAlarm	Indicates the severity level of the most severe alarm for the module on this slot. Relevant only for main unit.	Integer Indeterminate [0] Critical [1] Major [2] Minor [3] Warning [4] Cleared [5]	Read-only	1.3.6.1.4.1.2281.10.1.5.5.1.4
genEquip Unit ShelfManagement MngSwCommand	Executes a software operation for units in the shelf. Relevant only for main units.	Integer No operation [0] Download Upgrade Version [1] Upgrade [2] Rollback [3] Downgrade [4] Download Downgrade Version [5]	Read-write	1.3.6.1.4.1.2281.10.1.5.5.1.5
genEquip Unit ShelfManagement SlotReset	Allows resets for the specified unit.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.5.5.1.6

3.1.6 genEquipUnitProtection

Parameter	Description	Syntax	Access	OID
genEquip Protection Admin	Activates or deactivates protection. For 2Plus2Hsb, this parameter should be configured in both the main and extension slots.	Integer 1Plus1Hsb [2] Disable [3] 2Plus2Hsb [4]	Read-write	1.3.6.1.4.1.2281.10.1.6.1
genEquip Protection Mode	Indicates whether the card is in active or standby protection mode.	Integer Active [0] Standby [1]	Read-only	1.3.6.1.4.1.2281.10.1.6.2
genEquip Protection MateIPAddr	Configures the mate IP address. For 1+1 protection, it is the mate IP address of the protected card. For 2+2 protection, it is the mate IP address of the protected unit.	IP address	Read-only	1.3.6.1.4.1.2281.10.1.6.3
genEquip Protection MACAddr	Configures the mate MAC address. For 1+1 protection, it is the mate MAC address of the protected card. For 2+2 protection, it is the mate MAC address of the protected unit.	MAC address	Read-only	1.3.6.1.4.1.2281.10.1.6.4
genEquip Protection Radio ExcessiveBER Switch	Enables or disables using the excessive bit error rate (BER) alarm threshold as protection switch criteria. When enabled, crossing the excessive BER threshold will cause a protection switch.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.1.6.5

Parameter	Description	Syntax	Access	OID
genEquip Protection Lockout	Locks the mode of each card in the protection, to ensure that a protection switch will not occur.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.6.6
genEquip Protection ForceSwitch	Allows forcing a particular card to switch protection mode.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.6.7
genEquip Protection ManualSwitch	Allows a manual protection mode switch.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.6.8
genEquip Protection CopyToMate Comand	Copies configured parameters from the active to the standby unit.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.6.9
genEquip Protection CopyToMate Status	Indicates the status of the Copy-to-Mate operation when protection is enabled.	Integer Ready [0] In progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.1.6.10
genEquip Protection MultiUnitLAG Admin	Enables the Multi Unit LAG feature. It can only be activated in Single Pipe configuration, and only when protection is active (either 1+1 or 2+2).	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.1.6.11

3.1.7 genEquipUnitDiversity

Parameter	Description	Syntax	Access	OID
genEquip Diversity Type	Configures the type of hitless diversity to be used. Relevant only when protection is enabled.	Integer None [1] Space-diversity [2] Frequency-diversity [3]	Read-write	1.3.6.1.4.1.2281.10.1.7.1

Parameter	Description	Syntax	Access	OID
genEquip Diversity RevertiveMode	Determines whether hitless switches are revertive in the event that the primary radio channel does not have any errors.	Integer Non-revertive [0] Revertive [1]	Read-write	1.3.6.1.4.1.2281.10.1.7.2
genEquip Diversity PrimaryRadio	Configures which IDU to use as the primary radio channel.	Integer Upper-radio [0] Lower-radio [1]	Read-write	1.3.6.1.4.1.2281.10.1.7.3
genEquip Diversity RevertiveTimer	Configures the minimum amount of seconds without a failure in the primary radio, before performing a revertive switch.	Integer (seconds) [1-15]	Read-write	1.3.6.1.4.1.2281.10.1.7.4
genEquip Diversity ForceActive	Defines which radio to use for incoming traffic. Should only be used for testing purposes.	Integer none [0] local-radio [1] mate-radio [2]	Read-write	1.3.6.1.4.1.2281.10.1.6.5
genEquip Diversity SwitchCounter	Indicates the number of diversity switches performed since last time counter was cleared.	Integer	Read-only	1.3.6.1.4.1.2281.10.1.7.6
genEquip Diversity SwitchCounter Clear	Clears the switch counter.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.1.7.7
genEquip Diversity ReceiveRadio	Indicates which radio is in use for incoming traffic.	Integer Lower-IDU [0] Upper-IDU [1]	Read-only	1.3.6.1.4.1.2281.10.1.7.8

genEquipNetwork

Parameter	Description	Syntax	Access	OID
genEquip Network	Local and peer network settings	Subfolder	N/A	1.3.6.1.4.1.2281.10.2

Parameter	Description	Syntax	Access	OID
genEquip Network MateIp	Mate IP address (same as genEquip Protection MateIPAddr).	IP address	Read-only	1.3.6.1.4.1.2281.10.2.2
genEquip Network Management	Network management commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.2.4
genEquip Network IP	Configures parameters for a peer network element.	Subfolder	N/A	1.3.6.1.4.1.2281.10.2.5
genEquip Network FloatingIP	Indicates the floating IP used when system is in protection mode. This address must differ from system's own IP address as well as mate unit's and must be in the same subnet. A value of 0.0.0.0 disables the feature.	IP address	Read-write	1.3.6.1.4.1.2281.10.2.6

3.1.8 genEquipNetworkManagement

Parameter	Description	Syntax	Access	OID
genEquip Network Management Local Ip	Configures the local IP address.	IP address	Read-write	1.3.6.1.4.1.2281.10.2.4.1
genEquip Network Management Local SubnetMask	Configures the local subnet mask.	IP address	Read-write	1.3.6.1.4.1.2281.10.2.4.2
genEquip Network Management Local DefaultGateway	Configures the local default gateway.	IP address	Read-write	1.3.6.1.4.1.2281.10.2.4.3

Parameter	Description	Syntax	Access	OID
genEquip Network Management Local HWAddr	Indicates the MAC address used for management (related to the management IP address of the system).	MAC address	Read-only	1.3.6.1.4.1.2281.10.2.4.4
genEquip Network Management Remote SubnetMask	Indicates the remote subnet mask.	MAC address	Read-only	1.3.6.1.4.1.2281.10.2.4.5
genEquip Network Management NumOfPorts	Configures the number of management ports.	Integer [0-3]	Read-write	1.3.6.1.4.1.2281.10.2.4.6
genEquip Network Management InBandVLAN	Configures the number of in-band VLANs.	Integer [1-4090]	Read-write	1.3.6.1.4.1.2281.10.2.4.7
genEquip Network Management PortType	Configures the port management type.	Integer Out of Band [0] In Band [1]	Read-write	1.3.6.1.4.1.2281.10.2.4.8
genEquip Network Management PortCapacity	Configures the port capacity limit.	Integer (Kbps) 64 [0] 128 [1] 256 [2] 512 [3] 1024 [4] 2048 [5]	Read-write	1.3.6.1.4.1.2281.10.2.4.9
genEquip Network Management PortAutoNegotiation	Enables or disables the Auto Negotiation option, on all management ports.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.2.4.10
genEquip Network Management PortRate	Configures the port rate on all management ports.	Integer (Mbps) N/A [-1] n10 (10 Mbps) [0] n100 (100 Mbps) [1]	Read-write	1.3.6.1.4.1.2281.10.2.4.11

Parameter	Description	Syntax	Access	OID
genEquip Network Management PortDuplex	Configures half or full port duplex value on all management ports.	Integer Half [0] Full [1]	Read-write	1.3.6.1.4.1.2281.10.2.4.12
genEquip Network Management BlockMng TowardsLine	Blocks the in-band management frames to egress via the Ethernet line interface in pipe application.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.2.4.13

3.1.9 genEquipNetworkIP

Parameter	Description	Syntax	Access	OID
genEquip Network IPTable	Neighbor attributes, such as IP address, MAC address, slot, port number and description. It can be used by the NMS for topology discovery.	Sequence of genEquip Network IP Entry	N/A	1.3.6.1.4.1.2281.10.2.5.1
genEquip NetworkIP ClearAllPeerInfo	Clears the neighbor IP table information.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.2.5.2

3.1.9.1 genEquipNetworkIPTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip NetworkIP Entry	Network IP table entry.	Sequence of genEquip NetworkIP Entry	N/A	1.3.6.1.4.1.2281.10.2.5.1.1
genEquip NetworkIP EthernetPort	Ethernet port (local port) is the index of the table, to be taken from ifIndex.	Integer	Read-only	1.3.6.1.4.1.2281.10.2.5.1.1.1
genEquip NetworkIP PeerMacAddr	The peer (far-end) MAC address of the managed NE (CPU) connected on the local Ethernet port.	Octet string	Read-write	1.3.6.1.4.1.2281.10.2.5.1.1.2

Parameter	Description	Syntax	Access	OID
genEquip NetworkIP Peer IPAddr	The peer (far-end) IP address of the managed NE (CPU) connected on the local Ethernet port.	IP address	Read-write	1.3.6.1.4.1.2281.10.2.5.1.1.3
genEquip NetworkIP Peer SlotID	The peer (far-end) slot ID of the managed NE connected on the local Ethernet port.	Integer [0-31]	Read-write	1.3.6.1.4.1.2281.10.2.5.1.1.4
genEquip NetworkIP Peer PortNumber	The peer (far-end) port number of the managed NE connected on the local Ethernet port. The port number is sequential starting with 1.	Integer [0-255]	Read-write	1.3.6.1.4.1.2281.10.2.5.1.1.5
genEquip NetworkIP PeerDescr	User defined description for the peer port.	Display string Size: [0-64]	Read-write	1.3.6.1.4.1.2281.10.2.5.1.1.6
genEquip NetworkIP Peer NodeToNode Connection	This column is relevant only for STM-1/OC-3 connections. When enabled, it means that the STM-1/OC-3 port is connected with another Ceragon NE.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.2.5.1.1.7

3.2 genEquipFault

Parameter	Description	Syntax	Access	OID
genEquip Fault	View current alarms or the event log, and configure trap forwarding.	Subfolder	N/A	1.3.6.1.4.1.2281.10.3
genEquip CurrentAlarm	View current alarms	Subfolder	N/A	1.3.6.1.4.1.2281.10.3.1
genEquip TrapCfg	Trap forwarding commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.3.2

Parameter	Description	Syntax	Access	OID
genEquip EventLog	View the unit's alarms and event history.	Subfolder	N/A	1.3.6.1.4.1.2281.10.3.3
genEquip FaultErrno	Last error number of the application.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.4
genEquip FaultErrDesc	Description of the last application error.	Display string	Read-only	1.3.6.1.4.1.2281.10.3.5

3.2.1 genEquipCurrentAlarm

Parameter	Description	Syntax	Access	OID
genEquip CurrentAlarm LastChangeCounter	Increases after every change in the genEquip CurrentAlarm table.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.1.1
genEquip CurrentAlarm Table	Current alarm table.	Sequence of genEquip CurrentAlarm Entry	N/A	1.3.6.1.4.1.2281.10.3.1.2
genEquip MostSevereAlarm	Indicates the most severe alarm in the system.	Integer Indeterminate [0] Critical [1] Major [2] Minor [3] Warning [4] Cleared [5]	Read-only	1.3.6.1.4.1.2281.10.3.1.3

3.2.1.1 genEquipCurrentAlarmTable

Table index: genEquipUnitCurrentAlarmCounter

Parameter	Description	Syntax	Access	OID
genEquip CurrentAlarm Entry	Current alarm table entry.	Sequence of genEquip CurrentAlarm Entry	N/A	1.3.6.1.4.1.2281.10.3.1.2.1
genEquip CurrentAlarm Counter	Counter of open alarms, increases after each new alarm. It is cleared after reset.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.1

Parameter	Description	Syntax	Access	OID
genEquip CurrentAlarm RaisedTimeT	Time the alarm was raised.	Integer (seconds) Time in seconds since January 1, 1970 00:00 UTC.	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.2
genEquip CurrentAlarm Id	Alarm ID	Integer	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.3
genEquip CurrentAlarm Name	Alarm name	Display string	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.4
genEquip CurrentAlarm Instance	Indicates the instance of the alarm.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.5
genEquip CurrentAlarm Severity	Severity of the current alarm.	Integer Indeterminate [0] Critical [1] Major [2] Minor [3] Warning [4] Cleared [5]	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.6
genEquip CurrentAlarm IfIndex	Indicates the index of the interface where the alarm occurred.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.7
genEquip CurrentAlarm Module	Module of the alarm.	Display string Possible values are IDU or RFU.	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.8
genEquip CurrentAlarm Desc	Description of the alarm (same as the description in the sent trap).	Display string	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.9
genEquip CurrentAlarm ProbableCause	Probable cause of the alarm.	Display string	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.10
genEquip CurrentAlarm CorrectiveActions	Corrective actions that should be taken.	Display string	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.11
genEquip CurrentAlarm State	Indicates whether the alarm is RAISED or CLEARED.	Integer Cleared [0] Raised [1]	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.12

Parameter	Description	Syntax	Access	OID
genEquip CurrentAlarm SlotId	ID of the slot where the alarm originated.	Integer Standalone [0] Slot1 [1] Slot2 [2] Slot3 [3] Slot4 [4] Slot5 [5] Slot6 [6]	Read-only	1.3.6.1.4.1.2281.10.3.1.2.1.13

3.2.2 genEquipTrapCfg

Parameter name	Description	Syntax	Access	OID
genEquip TrapCfgMgr Table	Trap configuration table.	Sequence of genEquip TrapCfgMgr Entry	N/A	1.3.6.1.4.1.2281.10.3.2.1

3.2.2.1 genEquipTrapCfgMgrTable

Table index: genEquipUnitTrapCfgMgrID

Parameter	Description	Syntax	Access	OID
genEquip TrapCfgMgr Entry	Trap configuration table entry.	Sequence of genEquip TrapCfgMgr Entry	N/A	1.3.6.1.4.1.2281.10.3.2.1.1
genEquip TrapCfgMgr Id	Index of the selected trap configuration table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.2.1.1.1
genEquip TrapCfgMgr Admin	Enables / disables a specific manager. When disabled - will not send traps to this trap manager.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.2
genEquip TrapCfgMgr IP	Configures the manager's IP address.	IP address	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.3
genEquip TrapCfgMgr Port	Configures the port that sends the trap for each manager.	Integer [70-65535]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.4
genEquip TrapCfgMgr Name	Configures the name of the manager that	Display string Size: [0-30]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.5

	receives the traps.			
genEquip TrapCfgMgr Community	Configures the trap manager community.	Display string Size: [0-30]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.6
genEquip TrapCfgMgr SeverityFilter	Bit mask value for masking traps according to its severity. There is a bit for each severity.	Octet string Size: [1] The list of bits from LSB to MSB: Bit 1 – Indeterminate Bit 2 – Critical Bit 3 – Major Bit 4 – Minor Bit 5 – Warning Bit 6 – Cleared	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.7
genEquip TrapCfgMgr StatusChangeFilter	Enables or disables filtering alarms according to a change in the trap severity filter.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.8
genEquip TrapCfgMgr CLLI	Configures the Common Language Location Identifier (CLLI)	Display string Size: [0-100]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.9
genEquip TrapCfgMgr HeartbeatPeriod	Configures the minute interval between each heartbeat.	Integer Size: [0-1440]	Read-write	1.3.6.1.4.1.2281.10.3.2.1.1.10

3.2.3 genEquipEventLog

Parameter	Description	Syntax	Access	OID
genEquip EventLog Table	Event log table	Sequence of genEquip EventLog Entry	N/A	1.3.6.1.4.1.2281.10.3.3.1
genEquip EventLog Clear	Command that clears the event log. If enabled, will clear the event log.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.3.3.2

3.2.3.1 genEquipEventLogTable

Table index: genEquipUnitEventLogCounter

Parameter	Description	Syntax	Access	OID
genEquip EventLog Entry	Event log table entry.	Sequence of genEquip EventLog Entry	N/A	1.3.6.1.4.1.2281.10.3.3.1.1
genEquip EventLog Counter	Event counter.	Integer	Read-only	1.3.6.1.4.1.2281.10.3.3.1.1.1
genEquip EventLog RaisedTimeT	Raised time of this event.	Integer (seconds) Time in seconds since January 1, 1970 00:00 UTC (time_t format).	Read-only	1.3.6.1.4.1.2281.10.3.3.1.1.2
genEquip EventLog Severity	Severity of the current event.	Integer Indeterminate [0] Critical [1] Major [2] Minor [3] Warning [4] Cleared [5]	Read-only	1.3.6.1.4.1.2281.10.3.3.1.1.3
genEquip EventLog Module	Module of the event.	Display string	Read-only	1.3.6.1.4.1.2281.10.3.3.1.1.4
genEquip EventLog Desc	Event description (same as the description in the sent trap).	Display string	Read-only	1.3.6.1.4.1.2281.10.3.3.1.1.5
genEquip EventLog State	The state of the event or alarm.	Integer Cleared [0] Raised [1] Event [2]	Read-only	1.3.6.1.4.1.2281.10.3.3.1.1.6

3.3 genEquipMng

Parameter	Description	Syntax	Access	OID
genEquip Mng	Manage unit configuration archives and installed software versions.	Subfolder	N/A	1.3.6.1.4.1.2281.10.4

Parameter	Description	Syntax	Access	OID
genEquip MngSw	Manage software uploads and downloads.	Subfolder	N/A	1.3.6.1.4.1.2281.10.4.1
genEquip MngCfg	Manage unit configuration archives.	Subfolder	N/A	1.3.6.1.4.1.2281.10.4.2
genEquip MngFileTransfer	Manage file transfers.	Subfolder	N/A	1.3.6.1.4.1.2281.10.4.3

3.3.1 genEquipMngSw

Parameter	Description	Syntax	Access	OID
genEquip MngSw ServerUrl	URL of the remote software update server where software updates are located.	Display string	Read-write	1.3.6.1.4.1.2281.10.4.1.1
genEquip MngSw ServerLogin	Login name for the remote server.	Display string	Read-write	1.3.6.1.4.1.2281.10.4.1.2
genEquip MngSw ServerPassword	Password for the remote server.	Display string	Read-write	1.3.6.1.4.1.2281.10.4.1.3
genEquip MngSw DownlaodStatus	Status of the software download.	Integer Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.1.7
genEquip MngSw InstallStatus	Status of the software installation.	Integer Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.1.8

Parameter	Description	Syntax	Access	OID
genEquip MngSw Command	The command that is executed to manage SW versions. Depending on the value given, a different operation will be carried out involving FTP and/or version installing.	Integer noOperation [0] downloadUpgradeVersion [1] Load a newer version from FTP site. upgrade [2] Upgrade to newer version which has already been loaded. rollback [3] Install a previously working version without downloading downgrade [4] Downgrade to an older version which has alredy been loaded. downloadDowngradeVersion [5] Load an older version from FTP site. upgradeTimer [6] Starts the timer defined in genEquip MngSw InstallationTimer and upon expiration upgrades to a newer version which has already been loaded. rollbackTimer [7] Starts the timer defined in genEquip MngSw InstallationTimer and upon expiration install a previously working version without downloading. downgradeTimer [8] Starts the timer defined in genEquip MngSw InstallationTimer and upon expiration	Read-write	1.3.6.1.4.1.2281.10.4.1.9

Parameter	Description	Syntax	Access	OID
genEquip MngSw InstalledIduVersion	Package version of the installed IDU software.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.10
genEquip MngSw InstalledRfuVersion	Package version of the installed RFU software.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.11
genEquip MngSw Versions	Software management commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.4.1.13
genEquip MngSw InstallationTimer	The number of minutes for timed software installation operations to this unit.	Integer [1-1440]	Read-write	1.3.6.1.4.1.2281.10.4.1.14
genEquip MngSw TimeToInstall	The number of minutes from now for the unit to perform software installation. Zero indicates that no operation has been requested.	Integer (minutes) [1-1440]	Read-only	1.3.6.1.4.1.2281.10.4.1.15
genEquip MngSw Upgrade Common RfuVersion	Indicates the software version of the package installed on the RFU.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.16
genEquip MngSw Downgrade Common RfuVersion	Indicates the version of the RFU software downgrade package.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.17

3.3.1.1 genEquipMngSwVersions

Parameter	Description	Syntax	Access	OID
genEquip MngSw IDUVersions Table	IDU software versions table.	Sequence of genEquip MngSw IDUVersions Entry	N/A	1.3.6.1.4.1.2281.10.4.1.13.1

Parameter	Description	Syntax	Access	OID
genEquip MngSw TimerTable	Configures timed installatons.	Sequence of genEquip MngSw TimerEntry	N/A	1.3.6.1.4.1.2281.10.4.1.13.2

genEquipMngSwIDUVersionsTable

Table index: genEquipUnitMngSwIDUVersionsCounter

Parameter	Description	Syntax	Access	OID
genEquip MngSw IDUVersions Entry	IDU software versions table entry.	Sequence of genEquip MngSw IDUVersions Entry	N/A	1.3.6.1.4.1.2281.10.4.1.13.1.1
genEquip MngSw IDUVersions Counter	Index of the selected IDU software versions table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.1
genEquip MngSw IDUVersions PackageName	IDU software version package name.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.2
genEquip MngSw IDUVersions TargetDevice	The target device within the NE.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.3
genEquip MngSw IDUVersions RunningVersion	The running IDU software version.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.4
genEquip MngSw IDUVersions InstalledVersion	Indicates the software version of the installed package on the IDU. For example, in an IP10-G without a daughter-board, some of the packages will be installed but not running.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.5
genEquip MngSw IDUVersions Upgrade	Indicates the software version of the upgrade package on the	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.6

Package	IDU.			
genEquip MngSw IDUVersions Downgrade Package	Indicates the software version of the downgrade package on the IDU.	Display string	Read-only	1.3.6.1.4.1.2281.10.4.1.13.1.1.7

genEquipMngSwTimerTable

Table index: genEquipUnitMngSwTimerSlotNumber

Parameter	Description	Syntax	Access	OID
genEquip MngSw Timer Entry		Sequence of genEquip MngSw Timer Entry	N/A	1.3.6.1.4.1.2281.10.4.1.13.2.1
genEquip MngSw Timer SlotNumber	Indicates the ID of the target slot	Integer [1-6] Use [0] for stand-alone units.	Read-only	1.3.6.1.4.1.2281.10.4.1.13.2.1.1
genEquip MngSw Timer InstallationTimer	Configures the number of minutes before starting a timed software installation.	Integer [1-1440]	Read-write	1.3.6.1.4.1.2281.10.4.1.13.2.1.2
genEquip MngSw Timer TimeToInstall	Indicates the number of minutes left before starting a timed software installation.	Integer [1-1440]	Read-only	1.3.6.1.4.1.2281.10.4.1.13.2.1.3
genEquip MngSw Timer TimerAbort	Cancels a scheduled software installation. Note that this command will not abort an installation that is already in progress.	Integer Proceed [0] Abort [1]	Read-write	1.3.6.1.4.1.2281.10.4.1.13.2.1.4

3.3.2 genEquipMngCfg

Parameter	Description	Syntax	Access	OID
genEquip MngCfg BackupStatus	Current state of the configuration backup files creation in the IDU.	Integer Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.2.1
genEquip MngCfg RestoreStatus	Current state of configuration restoring from downloaded backup files.	Integer Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.2.2
genEquip MngCfg UploadStatus	Current state of configuration backup files transfer from IDU to external FTP site.	Integer Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.2.3
genEquip MngCfg Download Status	Current state of configuration backup files transfer from external FTP site to IDU.	Integer Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.2.4
genEquip MngCfg Command	Executes one of the system configuration commands. If there is more then one slot in the NE, it is done for the entire shelf.	Integer No Operation [0] Backup [1] Restore [2] Upload [3] Download [4]	Read-write	1.3.6.1.4.1.2281.10.4.2.5
genEquip MngCfg EthernetSwitch StoreConfiguration	Writes the current command to the database. This command should be used after changes to: Bridge configuration Wayside configuration Protection configuration	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.4.2.6

Parameter	Description	Syntax	Access	OID
genEquip MngCfg SetToDefault KeepIp	Set to Default configuration without changing the network parameters such as IP address and subnet mask.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.4.2.7
genEquip MngCfg CliScriptFileName	The CLI script file name to be downloaded to the NE.	Display string	Read-write	1.3.6.1.4.1.2281.10.4.2.8

3.3.3 genEquipMngFileTransfer

Parameter	Description	Syntax	Access	OID
genEquip MngFileTransfer FileTypeOper	Operation for the file type to be transferred between the IDU and the external server. Options with the prefix 'download' are files to be transferred from the server to the IDU. Options with the prefix 'upload' are files to be transferred from the IDU to the server.	File transfer file type: No operation [0] Download configuration [1] Download certificate [2] Download warning-banner [3] Download CLI script [4] Upload configuration [5] Upload CSR file [6] Upload unit info [7]	Read-write	1.3.6.1.4.1.2281.10.4.3.1
genEquip MngFileTransfer DownloadConfig Status	Operational status of configuration file download performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.2
genEquip MngFileTransfer DownloadCertificate Status	Operational status of certificate download performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.3

Parameter	Description	Syntax	Access	OID
genEquip MngFileTransfer Download WarningBanner Status	Operational status of warning banner download performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.4
genEquip MngFileTransfer DownloadCliScript Status	Operational status of CLI script download performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.5
genEquip MngFileTransfer UploadConfig Status	Operational status of configuration file upload performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.6
genEquip MngFileTransfer UploadCSR Status	Operational status of CSR file upload performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.7
genEquip MngFileTransfer UploadUnitInfo Status	Operational status of unit info file upload performed using genEquip MngFileTransfer FileTypeOper.	Progress status: Ready [0] In Progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.4.3.8

3.4 genEquipRFU

Parameter	Description	Syntax	Access	OID
genEquip RFU	Parameters that describe the status of the RFU unit.	Subfolder	N/A	1.3.6.1.4.1.2281.10.5
genEquip RfuStatus Table	RFU signal status data table.	Sequence of genEquip RfuStatus Entry	N/A	1.3.6.1.4.1.2281.10.5.1

Parameter	Description	Syntax	Access	OID
genEquip RfuCfg Table	Parameters for configuring the RFU unit.	Sequence of genEquip RfuCfg Entry	N/A	1.3.6.1.4.1.2281.10.5.2
genEquip RfuUpload Table	RFU upload table.	Sequence of genEquip RfuUpload Entry	N/A	1.3.6.1.4.1.2281.10.5.3

3.4.1 genEquipRfuStatusTable

Table index: genEquipUnitRfuStatusId

Parameter	Description	Syntax	Access	OID
genEquip RfuStatus Entry	RFU signal status data table entry.	Sequence of genEquip RfuStatus Entry	N/A	1.3.6.1.4.1.2281.10.5.1.1
genEquip RfuStatus Id	Index of the selected RFU signal status data table entry.	RFU ID	Read-only	1.3.6.1.4.1.2281.10.5.1.1.1
genEquip RfuStatus RxLevel	The RFU receive level status.	Integer [-199-0]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.2
genEquip RfuStatus TxLevel	The RFU transmit level status.	Integer [-199-34]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.3
genEquip RfuStatus Temperature	The temperature of the RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.4
genEquip RfuStatus RunningVersion	The running software version on the RFU.	Display string	Read-only	1.3.6.1.4.1.2281.10.5.1.1.5
genEquip RfuStatus RFUType	The different types of the supported RFUs.	Integer Unknown [2] RFU-1500P [3] RFU-1500HP [5] RFU-1500SP [6] RFU-C [7] RFU-H [8] RFU-H1 [9] RFU-C1 [10]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.6

		RFU-SP [11] RFU-HP [12] RFU-A [13] RFU-D [14] RFU-1500P (32) RFU-1500HP (34) RFU-1500SP (35) RFU-C (36) RFU-H (37) RFU-C (38) RFU-H (39) RFU-SP (40) RFU-HP (41) RFU-A (42) RFU-D (43)		
genEquip RfuStatus RFUGrade	Indicates the grade of the RFU connection.	Integer Unknown [0] Grade 1 [1] Grade 2 [2] Grade 3 [3]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.7
genEquip RfuStatus TxRxFreqSeparation	Tx to Rx frequency separation. For some RFUs the user cannot set the Tx and Rx frequencies separately (one of them affects the other one's value).	Integer (MHz)	Read-only	1.3.6.1.4.1.2281.10.5.1.1.8
genEquip RfuStatus RFUMode	Configures the RFU inbound frequency combining mode.	Integer Main [2] Diversity [3] Combined [4]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.9
genEquip RfuStatus RxLevelDiversity	Rx diversity level inbound frequency combining parameter.	Integer (dBm) [-199-0]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.10
genEquip RfuStatus RxLevelCombined	Rx combined level inbound frequency combining parameter.	Integer (dBm) [-199-0]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.11
genEquip RfuStatus AutoDelayCalStatus	Automatic delay calibration status (inbound frequency combining parameter).	Integer No action [2] Pass [3] Error [4]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.12
genEquip	RFU unit serial	Display string	Read-only	1.3.6.1.4.1.2281.10.5.1.1.13

RfuStatus RFU SerialNumber	number.			
genEquip RfuStatus RFU PartNumber	RFU unit part number.	Display string	Read-only	1.3.6.1.4.1.2281.10.5.1.1.14
genEquip RfuStatus RFU MateCarrier	The returned value indicates the slot number of the 'copartner RFU-D carrier'. The returned value will be [-1] when the RFU is not RFU-D, or if the 'copartner RFU-D' carrier is not found.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.15
genEquip RfuStatus RFU MaxTxFreq	The maximum Tx frequency of the RFU allowed by the RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.16
genEquip RfuStatus RFU MinTxFreq	The minimum Tx frequency of the RFU allowed by the RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.17
genEquip RfuStatus RFU MaxRxFreq	The maximum Rx frequency allowed by the RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.18
genEquip RfuStatus RFU MinRxFreq	The minimum Rx frequency allowed by the RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.19
genEquip RfuStatus Installation	Returns all-indoor or split according to the RFU installation.	Integer Split Mount [0] All-Indoor [1]	Read-only	1.3.6.1.4.1.2281.10.5.1.1.20
genEquip RfuStatus DataSciErrors	Number of data SCI errors.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.21
genEquip RfuStatus DeviceError	Status device error.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.1.1.22

3.4.2 genEquipRfuCfgTable

Table index: genEquipUnitRfuCfgId

Parameter	Description	Syntax	Access	OID
genEquip RfuCfg Entry	Entry that contains the data for the RFU configuration	Sequence of genEquip RfuCfg Entry	N/A	1.3.6.1.4.1.2281.10.5.2.1
genEquip RfuCfg Id	Index of a specific RFU configuration.	RFU ID	Read-only	1.3.6.1.4.1.2281.10.5.2.1.1
genEquip RfuCfg MaxTxLevel	RFU maximum transmit level configuration.	Integer [-50-34]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.2
genEquip RfuCfg TxFreq	Tx frequency configuration.	Integer (Mhz)	Read-write	1.3.6.1.4.1.2281.10.5.2.1.3
genEquip RfuCfg RxFreq	Rx frequency configuration.	Integer (Mhz)	Read-write	1.3.6.1.4.1.2281.10.5.2.1.4
genEquip RfuCfg ATPC Admin	Enable / disable Automatic Transmit Power Control (ATPC) mode.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.5
genEquip RfuCfg ATPCRefRSL	Configures the ATPC RSL reference level.	Integer (dBm) [-70-30]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.6
genEquip RfuCfg MuteTx	Mute the Tx output of the RFU.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.7
genEquip RfuCfg RSLConnSrc	Configures the RFU's inbound frequency combining RSL connector source.	Integer Main [2] Diversity [3]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.8
genEquip RfuCfg DelayCal	IF combining - delay calibration.	Integer [-130-130]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.9
genEquip RfuCfg Loopback	RFU RF loopback command.	Integer Off [0] Towards System [1]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.10
genEquip RfuCfg LogAdmin	Enable / disable the RFU internal log file.	Integer Enable [2]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.11

		Disable [3]		
genEquip RfuCfg Clear ComDeviceError	Clear COM device errors.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.12
genEquip RfuCfg GreenMode Admin	Enables/disables RFU green mode. This mode minimizes power consumption while ensuring the highest transmission power possible to get an RSL not higher than defined in the reference level genEquip RfuCfg GreenMode ReferenceLevel.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.13
genEquip RfuCfg GreenMode ReferenceLevel	RSL reference level for Green mode operation.	Integer (dB)	Read-write	1.3.6.1.4.1.2281.10.5.2.1.14
genEquip RfuCfg ATPCOverride TxLevel	Configures the default transmission signal level in case of ATPC override due to expiration of maximum power timer as defined in genEquip RfuCfg ATPCOverride Timeout.	Integer [-50…34]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.15
genEquip RfuCfg ATPCOverride Timeout	Configures the timer to be counted while in ATPC in case of maximum power transmission. If this timer expires, the system transmits at the default level defined in genEquip RfuCfg ATPCOverride	Integer [0-600]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.16

	TxLevel			
genEquip RfuCfg ATPCOverride TimerCounter	Shows the time left in the timer as defined by genEquip RfuCfg ATPCOverride TxLevel.	Integer [0-600]	Read-only	1.3.6.1.4.1.2281.10.5.2.1.17
genEquip RfuCfg ATPCOverride TimerCancel	Cancels ATPC override mode. This setting is only effective while in this mode "i.e. the system has been transmitting at maximum power for a time longer than defined in genEquip RfuCfgATPC OverrideTxLevel, and the system is now transmitting at the default level defined in genEquip RfuCfgATPC OverrideTxLevel. Following execution, the system goes back to normal ATPC operating mode.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.5.2.1.18

3.4.3 genEquipRfuUploadTable

Table index: genEquipUnitRfuUploadId

Parameter	Description	Syntax	Access	OID
genEquip RfuUpload Entry	RFU upload table entry.	Sequence of genEquip RfuUpload Entry	N/A	1.3.6.1.4.1.2281.10.5.3.1
genEquip RfuUpload Id	Index of a RFU upload table entry.	Radio ID	Read-only	1.3.6.1.4.1.2281.10.5.3.1.1
genEquip RfuUpload SwCommand	Initiates the software upload to the RFU.	Integer Upload software [1] No Operation [2]	Read-write	1.3.6.1.4.1.2281.10.5.3.1.2

genEquip RfuUpload SwStatus	Status of the software upload operation on the RFU.	Integer No load [0] Load error [1] Load start [2] Load send block [3] Load done [5]	Read-only	1.3.6.1.4.1.2281.10.5.3.1.3
genEquip RfuUpload Counter	This parameter shows the progress (in blocks) of RFU software download.	Integer	Read-only	1.3.6.1.4.1.2281.10.5.3.1.4

3.5 genEquipPM

Parameter	Description	Syntax	Access	OID
genEquip Pm	Performance monitoring tables.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6
genEquip PmRFU	RFU performance monitoring.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.1
genEquip PmTraffic	Aggregate radio performance monitoring data.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.2
genEquip PmAll	Performance monitoring of the RFU signal levels	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3
genEquip PmStatistics	Manage performance monitoring tables.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.4

3.5.1 genEquipPmRfu

Parameter	Description	Syntax	Access	OID
genEquip PmRFU Common	Common parameters for RFU signal level performance monitoring.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.1.1
genEquip PmRFU CommonSL 15Min Table	RFU 15 minute signal level performance monitoring table.	Sequence of genEquip PmRFU CommonSL 15Min Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.1

genEquip PmRFU CommonSL 15MinCurr Table	Current 15 minute interval RFU signal level performance monitoring table.	Sequence of genEquip PmRFU CommonSL 15MinCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.2
genEquip PmRFU CommonSL 24hr Table	24 hour interval RFU signal level performance monitoring table.	Sequence of genEquip PmRFU CommonSL 24hr Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.3
genEquip PmRFU CommonSL 24hrCurr Table	24 hour interval RFU performance monitoring table.	Sequence of genEquip PmRFU CommonSL 24hrCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.4

3.5.1.1 genEquipPmRfuCommon15MinTable

Table index: genEquipPmRFUCommonSL15MinId

Parameter	Description	Syntax	Access	OID
genEquip PmRFU CommonSL 15Min Entry	RFU signal level performance monitoring table entry.	Sequence of genEquip PmRFU CommonSL 15Min Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.1.1
genEquip PmRFU CommonSL 15Min Id	Index of a specific RFU signal level.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.1
genEquip PmRFU CommonSL 15Min IfIndex	Interface index of a specific RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.2
genEquip PmRFU CommonSL 15Min TimeAndDate	Time and date for the selected signal level PM interval.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.3
genEquip PmRFU CommonSL	Minimum Radio Signal Level (RSL)	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.4

15Min MinRsl	value.			
genEquip PmRFU CommonSL 15Min MaxRsl	Maximum RSL value.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.5
genEquip PmRFU CommonSL 15Min RslExceed1	Number of seconds that RSL exceeded threshold number 1.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.6
genEquip PmRFU CommonSL 15Min RslExceed2	Number of seconds that RSL exceeded threshold number 2.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.7
genEquip PmRFU CommonSL 15Min MinTsl	Minimum Transmitted Signal Level (TSL) value.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.8
genEquip PmRFU CommonSL 15Min MaxTsl	Maximum TSL value.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.9
genEquip PmRFU CommonSL 15Min TslExceed	Maximum TSL value.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.10
genEquip PmRFU CommonSL 15Min IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.1.1.1.1.11

3.5.1.2 genEquipPmRfuCommon15MinCurrTable

Table index: genEquipPmRFUCommonSL15MinCurrId

Parameter	Description	Syntax	Access	OID
genEquip PmRFU CommonSL	Current 15 minute interval RFU signal level performance	Sequence of genEquip PmRFU	N/A	1.3.6.1.4.1.2281.10.6.1.1.2.1

15MinCurr Entry	monitoring table entry.	CommonSL 15MinCurr Entry		
genEquip PmRFU CommonSL 15MinCurr Id	Index of a specific current 15 minute interval RFU signal level table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.1
genEquip PmRFU CommonSL 15MinCurr IfIndex	Interface index of a specific current 15 minute interval RFU signal level table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.2
genEquip PmRFU CommonSL 15MinCurr TimeAndDate	Time and date for the current 15 minute RFU signal level table entry.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.3
genEquip PmRFU CommonSL 15MinCurr MinRsl	Minimum radio signal level (RSL) for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.4
genEquip PmRFU CommonSL 15MinCurr MaxRsl	Maximum radio signal level (RSL) for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.5
genEquip PmRFU CommonSL 15MinCurr RslExceed1	Number of seconds that RSL exceeded threshold number 1 for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.6
genEquip PmRFU CommonSL 15MinCurr RslExceed2	Number of seconds that RSL exceeded threshold number 2 for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.7
genEquip PmRFU CommonSL 15MinCurr MinTsl	Minimum transmitted signal level (TSL) value for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.8
genEquip PmRFU CommonSL 15MinCurr	Maximum transmitted signal level (TSL) value for the selected	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.9

MaxTsl	interval.			
genEquip PmRFU CommonSL 15MinCurr TslExceed	Number of seconds during which the TSL exceeded its threshold for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.10
genEquip PmRFU CommonSL 15MinCurr IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.1.1.2.1.11

3.5.1.3 genEquipPmRfuCommon24hrTable

Table index: genEquipPmRFUCommonSL124hrId

Parameter	Description	Syntax	Access	OID
genEquip PmRFU CommonSL 24hr Entry	24 hour interval RFU signal level performance monitoring table entry.	Sequence of genEquip PmRFU CommonSL 24hr Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.3.1
genEquip PmRFU CommonSL 24hr Id	Interface index of a specific RFU, as specified in the ifTable.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.1
genEquip PmRFU CommonSL 24hr IfIndex	Interface index of a specific RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.2
genEquip PmRFU CommonSL 24hr TimeAndDate	Time and date of the selected 24 hour RFU signal level table entry.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.3
genEquip PmRFU CommonSL 24hr MinRsl	Minimum radio signal level (RSL) value for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.4
genEquip PmRFU CommonSL	Maximum radio signal level (RSL) value for the	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.5

24hr MaxRsl	selected interval.			
genEquip PmRFU CommonSL 24hr RslExceed1	Number of seconds during which the RSL exceeded threshold number 1 for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.6
genEquip PmRFU CommonSL 24hr RslExceed2	Number of seconds during which RSL exceeded threshold number 2 for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.7
genEquip PmRFU CommonSL 24hr MinTsl	Minimum transmitted signal level (TSL) value for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.8
genEquip PmRFU CommonSL 24hr MaxTsl	Maximum transmitted signal level (TSL) value for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.9
genEquip PmRFU CommonSL 24hr TslExceed	Number of seconds that the transmitted signal level (TSL) exceeded its threshold for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.10
genEquip PmRFU CommonSL 24hr IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.1.1.3.1.11

3.5.1.4 genEquipPmRfuCommon24hrCurrTable

Table index: genEquipPmRFUCommonSL124hrCurrId

Parameter	Description	Syntax	Access	OID
genEquip PmRFU CommonSL 24hrCurr Entry	24 hour interval RFU performance monitoring table entry.	Sequence of genEquip PmRFU CommonSL 24hrCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.1.1.4.1

genEquip PmRFU CommonSL 24hrCurr Id	Index of a specific 24 hour interval RFU performance monitoring table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.1
genEquip PmRFU CommonSL 24hrCurr IfIndex	Interface index of a specific RFU, as specified in the ifTable.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.2
genEquip PmRFU CommonSL 24hrCurr TimeAndDate	Time and date of the current 24 hour RFU signal level interval table entry.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.3
genEquip PmRFU CommonSL 24hrCurr MinRsl	Minimum radio signal level (RSL) value for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.4
genEquip PmRFU CommonSL 24hrCurr MaxRsl	Maximum RSL value for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.5
genEquip PmRFU CommonSL 24hrCurr RslExceed1	Number of seconds that RSL exceeded threshold number 1 for a selected current 24 hour interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.6
genEquip PmRFU CommonSL 24hrCurr RslExceed2	Number of seconds that RSL exceeded threshold number 2 for a selected current 24 hour interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.7
genEquip PmRFU CommonSL 24hrCurr MinTsl	Minimum transmitted signal level (TSL) value for a selected current 24 hour interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.8
genEquip PmRFU CommonSL 24hrCurr MaxTsl	Maximum transmitted signal level (TSL) value for a selected current 24 hour interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.9

genEquip PmRFU CommonSL 24hrCurr TslExceed	Number of seconds that the TSL exceeded the threshold during the selected current 24 hour interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.10
genEquip PmRFU CommonSL 24hrCurr IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.1.1.4.1.11

3.5.2 genEquipPmTraffic

Parameter	Description	Syntax	Access	OID
genEquip PmTraffic RadioAgg 15Min Table	Table for aggregate radio performance monitoring data.	Sequence of genEquip PmTraffic RadioAgg 15Min Entry	N/A	1.3.6.1.4.1.2281.10.6.2.1
genEquip PmTraffic RadioAgg 15MinCurr Table	15 minute interval PMs of aggregate radio performance table.	Sequence of genEquip PmTraffic RadioAgg 15MinCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.2.2
genEquip PmTraffic RadioAgg 24hr Table	Daily aggregate radio PM table.	Sequence of genEquip PmTraffic RadioAgg 24hr Entry	N/A	1.3.6.1.4.1.2281.10.6.2.3
genEquip PmTraffic RadioAgg 24hrCurr Table	Current daily aggregate radio PM table.	Sequence of genEquip PmTraffic RadioAgg 24hrCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.2.4

3.5.2.1 genEquipPmTrafficRadioAgg15MinTable

Table index: genEquipPmTrafficRadioAgg15MinId

Parameter	Description	Syntax	Access	OID
genEquip PmTraffic	Aggregate RFU PM	Sequence of genEquip	N/A	1.3.6.1.4.1.2281.10.6.2.1.1

RadioAgg 15Min Entry	radio table entry.	PmTraffic RadioAgg 15Min Entry		
genEquip PmTraffic RadioAgg 15Min Id	Index of aggregate RFU PM radio table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.1
genEquip PmTraffic RadioAgg 15Min IfIndex	Interface index of a specific RFU.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.2
genEquip PmTraffic RadioAgg 15Min TimeandDate	Time and date for the selected 15 minute signal level PM interval.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.3
genEquip PmTraffic RadioAgg 15Min ES	Number of seconds during which errors occurred for the selected 15 minute interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.4
genEquip PmTraffic RadioAgg 15Min SES	Number of seconds during which severe errors occurred for the selected 15 minute interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.5
genEquip PmTraffic RadioAgg 15Min UAS	Number of seconds that the signal was unavailable for the selected 15 minute interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.6
genEquip PmTraffic RadioAgg 15Min BBE	Number of background block errors.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.7
genEquip PmTraffic RadioAgg 15Min IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.2.1.1.8

3.5.2.2 genEquipPmTrafficRadioAgg15MinCurrTable

Table index: genEquipPmTrafficRadioAgg15MinCurrId

Parameter	Description	Syntax	Access	OID
genEquip PmTraffic RadioAgg 15MinCurr Entry	15 minute interval PMs of aggregate radio performance table entry.	Sequence of genEquip PmTraffic RadioAgg 15MinCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.2.2.1
genEquip PmTraffic RadioAgg 15MinCurr Id	Index of a 15 minute interval PMs of aggregate radio performance table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.1
genEquip PmTraffic RadioAgg 15MinCurr IfIndex	Interface index of a specific RFU, as specified in the ifTable.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.2
genEquip PmTraffic RadioAgg 15MinCurr TimeandDate	Time and date for the current 15 minute signal level PM interval.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.3
genEquip PmTraffic RadioAgg 15MinCurr ES	Number of seconds during which errors occurred for the selected 15 minute interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.4
genEquip PmTraffic RadioAgg 15MinCurr SES	Number of seconds during which severe errors occurred for the selected 15 minute interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.5
genEquip PmTraffic RadioAgg 15MinCurr UAS	Number of seconds that the signal was unavailable for the selected 15 minute interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.6
genEquip PmTraffic RadioAgg 15MinCurr BBE	Number of background block errors for the selected 15 minute interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.7
genEquip PmTraffic	The Invalid Data Flag (IDF) value	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.2.1.8

RadioAgg 15MinCurr IDF	indicates the integrity of the PM data for the selected interval.	Integrity [0] No Integrity [1]		

3.5.2.3 genEquipPmTrafficRadioAgg24hrTable

Table index: genEquipPmTrafficRadioAgg24hrId

Parameter	Description	Syntax	Access	OID
genEquip PmTraffic RadioAgg 24hr Entry	Daily aggregate radio PM table entry.	Sequence of genEquip PmTraffic RadioAgg 24hr Entry	N/A	1.3.6.1.4.1.2281.10.6.2.3.1
genEquip PmTraffic RadioAgg 24hr Id	Index of a specific daily aggregate radio PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.1
genEquip PmTraffic RadioAgg 24hr IfIndex	Interface index of a specific RFU, as specified in the ifTable.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.2
genEquip PmTraffic RadioAgg 24hr TimeandDate	Time and date for the selected daily aggregate radio PM interval.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.3
genEquip PmTraffic RadioAgg 24hr ES	Number of seconds during which errors occurred for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.4
genEquip PmTraffic RadioAgg 24hr SES	Number of seconds during which severe errors occurred for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.5
genEquip PmTraffic RadioAgg 24hr UAS	Number of seconds that the signal was unavailable during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.6
genEquip	Number of	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.7

PmTraffic RadioAgg 24hr BBE	background block errors during the selected interval.			
genEquip PmTraffic RadioAgg 24hr IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.2.3.1.8

3.5.2.4 genEquipPmTrafficRadioAgg24hrCurrTable

Table index: genEquipPmTrafficRadioAgg24hrCurrId

Parameter	Description	Syntax	Access	OID
genEquip PmTraffic RadioAgg 24hrCurr Entry	Current daily aggregate radio PM table entry.	Sequence of genEquip PmTraffic RadioAgg 24hrCurr Entry	N/A	1.3.6.1.4.1.2281.10.6.2.4.1
genEquip PmTraffic RadioAgg 24hrCurr Id	Index of a specific current 24 hour aggregate radio PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.1
genEquip PmTraffic RadioAgg 24hrCurr IfIndex	Interface index of a specific RFU, as specified in the ifTable.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.2
genEquip PmTraffic RadioAgg 24hrCurr TimeandDate	Time and date for the current daily aggregate radio PM interval.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.3
genEquip PmTraffic RadioAgg 24hrCurr ES	Number of seconds during which errors occurred during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.4
genEquip PmTraffic RadioAgg 24hrCurr SES	Number of seconds during which severe errors occurred during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.5

genEquip PmTraffic RadioAgg 24hrCurr UAS	Number of seconds that the signal was unavailable during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.6
genEquip PmTraffic RadioAgg 24hrCurr BBE	Number of background block errors during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.7
genEquip PmTraffic RadioAgg 24hrCurr IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.2.4.1.8

3.5.3 genEquipPmAll

Parameter	Description	Syntax	Access	OID
genEquip PmClear	Clears the values for all of the performance monitoring tables.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.6.3.1
genEquip PmTrafficSL	RFU signal level PM.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3.2
genEquip PmTrafficAgg	Aggregate radio performance monitoring data.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3.3
genEquip PmRadio	Radio performance monitoring data tables.	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3.4
genEquip PmTdm	Time Division Multiplexing (TDM) performance	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3.5
genEquip PmSdh	SDH performance monitoring data	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3.6
genEquip PmTrails	Trail performance data	Subfolder	N/A	1.3.6.1.4.1.2281.10.6.3.7

3.5.3.1 genEquipPmTrafficSL

Parameter	Description	Syntax	Access	OID
genEquip PmTraffic SL Table	RFU signal level PM table.	Sequence of genEquip PmTraffic SL Entry	N/A	1.3.6.1.4.1.2281.10.6.3.2.1

genEquipPmTrafficSLTable

Table indexes: genEquipPmTrafficSLPmType, genEquipPmTrafficSLId, genEquipPmTrafficSLInterval

Parameter	Description	Syntax	Access	OID
genEquip PmTrafficSL Entry	RFU signal level PM table entry.	Sequence of genEquip PmTraffic SL Entry	N/A	1.3.6.1.4.1.2281.10.6.3.2.1.1
genEquip PmTrafficSL PmType	Indicates which signal level PM table to access (15 min, Current 15 min, 24 hr, Current 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.1
genEquip PmTrafficSL Id	Interface index of a specific RFU, as specified in the ifTable.	RFU ID	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.2
genEquip PmTrafficSL Interval	Index of a specific RFU signal level PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.3
genEquip PmTrafficSL MinRsl	Minimum radio signal level value during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.4
genEquip PmTrafficSL MaxRsl	Maximum RSL value during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.5
genEquip PmTrafficSL RslExceed1	Number of seconds that RSL exceeded threshold number 1 during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.6

genEquip PmTrafficSL RslExceed2	Number of seconds that RSL exceeded threshold number 2 during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.7
genEquip PmTrafficSL MinTsl	Minimum transmitted signal level (TSL) value during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.8
genEquip PmTrafficSL MaxTsl	Maximum TSL value during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.9
genEquip PmTrafficSL MinTslExceed	Number of seconds that TSL exceeded the configured threshold during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.10
genEquip PmTrafficSL IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.2.1.1.11

3.5.3.2 genEquipPm TrafficAgg

Parameter	Description	Syntax	Access	OID
genEquip PmTrafficAgg Table	Aggregate radio performance monitoring data table.	Sequence of genEquip Pm TrafficAgg Entry	N/A	1.3.6.1.4.1.2281.10.6.3.3.1

genEquipPmTrafficAggregateTable

Table indexes: genEquipPmTrafficAggPmType, ifIndex, genEquipPmTrafficAggInterval

Parameter	Description	Syntax	Access	OID
genEquip PmTrafficAgg Entry	Aggregate radio performance monitoring data table entry.	Sequence of genEquip Pm TrafficAgg Entry	N/A	1.3.6.1.4.1.2281.10.6.3.3.1.1
genEquip PmTrafficAgg	Indicates which aggregate radio PM	Integer PM 15 min current	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.1

Type	table to access (15 min, Current 15 min, 24 hr, Current 24 hr).	[1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]		
genEquip PmTrafficAgg Interval	Index of a specific aggregate radio performance monitoring data table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.2
genEquip PmTrafficAgg ES	Number of seconds during which errors occurred during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.3
genEquip PmTrafficAgg SES	Number of seconds during which severe errors occurred during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.4
genEquip PmTrafficAgg UAS	Number of seconds that the signal was unavailable during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.5
genEquip PmTrafficAgg BBE	Number of background block errors during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.6
genEquip PmTrafficAgg IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] nointegrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.3.1.1.7

3.5.3.3 genEquipPmRadio

Parameter	Description	Syntax	Access	OID
genEquip PmRadioMRMC Table	MRMC performance monitoring data table.	Sequence of genEquip Pm Radio MRMC Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.1.1

Parameter	Description	Syntax	Access	OID
genEquip PmRadioTDM Table	Radio TDM channel performance monitoring data table.	Sequence of genEquip Pm Radio TDM Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.2.1
genEquip PmRadioEthernet Table	Radio Ethernet PM table.	Sequence of genEquip Pm Radio Ethernet Entry.	N/A	1.3.6.1.4.1.2281.10.6.3.4.3.1
genEquip PmRadioEthernet Threshold Table	Ethernet throughput, capacity and utilization thresholds	Sequence of genEquip Pm Radio Ethernet Threshold Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.3.2
genEquip PmRadioEthernet Etm Table	ETM PM table	Sequence of genEquip Pm Radio Ethernet Etm Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.3.3
genEquip PmRadioMSE Table	Minimum Square Error (MSE) radio performance monitoring table	Sequence of genEquip Pm Radio MSE Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.4
genEquip PmRadio Threshold Table	Radio PM threshold configuration table.	Sequence of genEquip Pm Radio Threshold Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.5
genEquip PmRadioXPI Table	Radio XPIC PM table.	Sequence of genEquip Pm Radio XPI Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.6

genEquipPmRadioMRMCTable

Table indexes: genEquipPmRadioMRMCPmType, genEquipPmRadioMRMCId, genEquipPmRadioMRMCInterval

Parameter	Description	Syntax	Access	OID
genEquip PmRadioMRMC Entry	MRMC performance monitoring data table entry.	Sequence of genEquip Pm Radio MRMC Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.1.1.1
genEquip PmRadioMRMC PmType	Indicates which PM table to access (15 min, Current 15 min, 24 hr, Current 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.1
genEquip PmRadioMRMC Id	Interface index of a specific RFU, as specified in the ifTable.	Radio ID	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.2
genEquip PmRadioMRMC Interval	Index of the selected MRMC PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.3
genEquip PmRadioMRMC IfIndex	Indicates the interface index of a specific RFU interface, as it appears in the ifTable.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.4
genEquip PmRadioMRMC MinProfile	Minimum MRMC profile during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.5
genEquip PmRadioMRMC MaxProfile	Maximum MRMC profile during the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.6
genEquip PmRadioMRMC MinBitrate	Minimum MRMC nominal bit rate during the selected interval.(Kbps)	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.7
genEquip PmRadioMRMC MaxBitrate	Maximum MRMC nominal bit rate during the selected interval. (Kbps)	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.8

genEquip PmRadioMRMC MinTDMIf	Minimum number of allocated TDM channels.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.9
genEquip PmRadioMRMC MaxTDMIf	Maximum number of allocated TDM channels.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.10
genEquip PmRadioMRMC IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.1.1.1.11

genEquipPmRadioTDMTable

Table indexes: genEquipPmRadioTDMPmType, ifIndex, genEquipPmRadioTDMnterval

Parameter	Description	Syntax	Access	OID
genEquip PmRadioTDM Entry	Radio TDM channel performance monitoring data table entry.	Sequence of genEquip Pm Radio TDM Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.2.1.1
genEquip PmRadioTDM PmType	Indicates which PM table to access (15 min, Current 15 min, 24 hr, Current 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.2.1.1.1
genEquip PmRadioTDM Interval	Index of the selected radio TDM channel PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.2.1.1.2
genEquip PmRadioTDM UAS	Number of unavailable TDM channel seconds (UAS) during the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.2.1.1.3
genEquip PmRadioTDM IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.2.1.1.4

genEquipPmRadioEthernetTable

Table indexes: genEquipPmRadioEthernetPmType, ifIndex, genEquipPmRadioEthernetInterval

Parameter	Description	Syntax	Access	OID
genEquip PmRadioEthernet Entry	Radio Ethernet PM table entry.	Sequence of genEquip Pm Radio Ethernet Entry.	N/A	1.3.6.1.4.1.2281.10.6.3.4.3.1.1
genEquip PmRadioEthernet PmType	Indicates which PM table to access (Current 15 min, 15 min, Current 24 hr, 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.1
genEquip PmRadioEthernet Interval	Index of the selected radio Ethernet PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.2
genEquip PmRadioEthernet FrameErrorRate	Indicates the percent of received error frames measured by the radio Ethernet port, relative to all frames received by the radio Ethernet port.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.3
genEquip PmRadioEthernet PeakThroughput	Indicates the maximum throughput measured during the selected interval, in bits per second (BpS).	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.4
genEquip PmRadioEthernet AverageThroughput	Indicates the average throughput measured during the selected interval, in bits per second (BpS).	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.5
genEquip PmRadioEthernet ExceedThroughput	Indicates the number of seconds that the throughput exceeded the	Integer (BpS)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.6

	threshold during the selected interval.			
genEquip PmRadioEthernet PeakCapacity	Indicates the maximum capacity measured during the last interval, in bits per second (BpS).	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.7
genEquip PmRadioEthernet AverageCapacity	Indicates the average capacity measured during the last interval, in bits per second (BpS). Ethernet capacity values include Ethernet data and overhead bytes.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.8
genEquip PmRadioEthernet ExceedCapacity	Indicates the number of seconds that the capacity exceeded the threshold during the selected interval.	Integer (BpS)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.9
genEquip PmRadioEthernet PeakUtilization	Indicates the maximum utilization measured during the last interval. Ethernet utilization is a measurement of actual Ethernet throughput relative to the potential Ethernet throughput of the radio, excluding TDM channels.	Integer (%)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.10
genEquip PmRadioEthernet AverageUtilization	Indicates the average utilization measured during the last interval (%). Ethernet utilization is a measurement of actual Ethernet throughput, relative to the potential Ethernet throughput of the radio (excluding TDM	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.11

	channels).?			
genEquip PmRadioEthernet ExceedUtilization	Indicates the number of seconds where utilization exceeded the threshold during the last interval.	Integer (%)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.12
genEquip PmRadioEthernet IDF	This value indicates if the Invalid Data Flag (IDF) was set.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.13

genEquipPmRadioEthernetThresholdTable

Parameter	Description	Syntax	Access	OID
genEquip PmRadioEthernet Threshold Entry	Ethernet throughput, capacity and utilization thresholds configuration table entry.	Sequence of genEquip Pm Radio Ethernet Threshold Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.3.2.1
genEquip PmRadioEthernet Threshold Throughput	Configures the Ethernet throughput threshold.	Integer (Mbps). [0-1000]	Read-write	1.3.6.1.4.1.2281.10.6.3.4.3.2.1.1
genEquip PmRadioEthernet Threshold Capacity	Configures the Ethernet capacity threshold.	Integer (Mbps). [0-1000]	Read-write	1.3.6.1.4.1.2281.10.6.3.4.3.2.1.2
genEquip PmRadioEthernet Threshold Utilization	Configures the Ethernet utilization threshold (as a percentage).	Integer Above 0 [0] Above 20 [1] Above 40 [2] Above 60 [3] Above 80 [4] No threshold [5]	Read-write	1.3.6.1.4.1.2281.10.6.3.4.3.2.1.3

genEquipPmRadioEthernetEtmTable

Table indexes: genEquipPmRadioEthernetEtmPmType, genEquipPmRadioEthernetEtmPmQueueIndex, genEquipPmRadioEthernetEtmInterval

Parameter	Description	Syntax	Access	OID
genEquip PmRadioEthernet	ETM PM table entry.	Sequence of genEquip	N/A	1.3.6.1.4.1.2281.10.6.3.4.3.3.1

Etm Entry		Pm Radio Ethernet Etm Entry		
genEquip PmRadioEthernet EtmPm Type	Indicates the PM table to access: 15 min, current 15 min, 24 hours or current 24 hours.	Integer pm15MinCurr [1] pm15Min [2] pm24hrCurr [3] pm24hr [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.1
genEquip PmRadioEthernet EtmPm QueueIndex	Queue index	Integer [1-8]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.2
genEquip PmRadioEthernet Etm Interval	Index of the selected ETM PM table entry.	Integer [0-96]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.3
genEquip PmRadioEthernet EtmPm Max GreenBytes Passed	Maximum green traffic bytes for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.4
genEquip PmRadioEthernet EtmPm Avg GreenBytes Passed	Average green traffic bytes for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.5
genEquip PmRadioEthernet EtmPm Max GreenFrames Dropped	Maximum green traffic bytes dropped for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.6
genEquip PmRadioEthernet EtmPm Avg GreenFrames Dropped	Average green traffic bytes dropped for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.7

genEquip PmRadioEthernet EtmPm Max YellowBytes Passed	Maximum yellow traffic bytes for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.8
genEquip PmRadioEthernet EtmPm Avg YellowBytes Passed	Average yellow traffic bytes for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.9
genEquip PmRadioEthernet EtmPm Max YellowFrames Dropped	Maximum yellow traffic bytes dropped for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.10
genEquip PmRadioEthernet EtmPm Avg YellowFrames Dropped	Average yellow traffic bytes dropped for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.11
genEquip PmRadioEthernet EtmPm Max RedFrames Dropped	Maximum red traffic bytes dropped for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.12
genEquip PmRadioEthernet EtmPm Avg RedFrames Dropped	Average red traffic bytes dropped for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.1.13
genEquip PmRadioEthernet EtmPm IDF	This value indicates if the Invalid Data Flag (IDF) was set.	Integer Integrity [0] No integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.3.3.14

genEquipPmRadioMSETable

Table indexes: genEquipPmRadioMSEPmType, ifIndex, genEquipPmRadioMSEInterval

Parameter	Description	Syntax	Access	OID
genEquip	MSE radio PM table	Sequence of	N/A	1.3.6.1.4.1.2281.10.6.3.4.4.1

PmRadioMSE Entry	entry.	genEquip Pm Radio MSE Entry		
genEquip PmRadioMSE PmType	Indicates which PM table to access (Current 15 min, 15Min , Current 24 hr, 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.4.1.1
genEquip PmRadioMSE Interval	Index of the selected MSE radio PM table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.4.1.2
genEquip PmRadioMSE MinMse	Indicates the minimum MSE in dB, measured for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.4.1.3
genEquip PmRadioMSE MaxMse	Indicates the maximum MSE in dB, measured for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.4.1.4
genEquip PmRadioMSE Exceeded	Indicates the number of seconds that the MSE exceeded the threshold for the selected interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.4.1.5
genEquip PmRadioMSE MinIDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.4.1.6

genEquipPmRadioThresholdTable

Parameter	Description	Syntax	Access	OID
genEquip PmRadioThreshold Entry	Radio PM threshold configuration table entry.	Sequence of genEquip Pm Radio Threshold Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.5.1

Parameter	Description	Syntax	Access	OID
genEquip PmRadioThreshold MSE	The threshold above which MSE exceeded seconds will be counted as errored seconds.	Integer	Read-write	1.3.6.1.4.1.2281.10.6.3.4.5.1.1
genEquip PmRadioThreshold RSL1	The threshold above which Radio Signal Level (RSL) 1 exceeded seconds will be counted as errored seconds.	Integer	Read-write	1.3.6.1.4.1.2281.10.6.3.4.5.1.2
genEquip PmRadioThreshold RSL2	The threshold above which RSL 2 exceeded seconds will be counted as errored seconds.	Integer	Read-write	1.3.6.1.4.1.2281.10.6.3.4.5.1.3
genEquip PmRadioThreshold TSL	The threshold above which Transmitted Signal Level (TSL) exceeded seconds will be counted as errored seconds.	Integer	Read-write	1.3.6.1.4.1.2281.10.6.3.4.5.1.4
genEquip PmRadioThreshold XPI	The threshold below which Cross Polar Interface (XPI) exceeded seconds will be counted as errored seconds.	Integer	Read-write	1.3.6.1.4.1.2281.10.6.3.4.5.1.5

genEquipPmRadioXPITable

Table indexes: genEquipPmRadioXPIPmType, ifIndex, genEquipPmRadioXPIInterval

Parameter	Description	Syntax	Access	OID
genEquip PmRadioXPI Entry	Radio XPIC PM table entry.	Sequence of genEquip Pm Radio XPI Entry	N/A	1.3.6.1.4.1.2281.10.6.3.4.6.1
genEquip PmRadioXPI PmType	Indicates which PM table to access (Current 15 min,	Integer PM 15 min current	Read-write	1.3.6.1.4.1.2281.10.6.3.4.6.1.1

	15Min , Current 24 hr, 24 hr).	[1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]		
genEquip PmRadioXPI PmInterval	Index of the selected PM interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.6.1.2
genEquip PmRadioXPI MinXPI	Indicates the minimum XPI in dB for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.6.1.3
genEquip PmRadioXPI MaxXPI	Indicates the maximum XPI in dB?for the selected interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.4.6.1.4
genEquip PmRadioXPI BelowThreshold	The number of seconds that the XPI value was below the configured threshold.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.4.6.1.5
genEquip PmRadioXPI IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.4.6.1.6

3.5.3.4 genEquipPmTdm

Parameter	Description	Syntax	Access	OID
genEquip PmTdm Table	The line TDM PM table.	Sequence of genEquip PmTdm Entry	N/A	1.3.6.1.4.1.2281.10.6.3.5.1

genEquipPmTdmTable

Table indexes: genEquipPmTdmPmType, ifIndex, genEquipPmTdmnterval

Parameter	Description	Syntax	Access	OID
genEquip PmTdm Entry	Line TDM PM table entry.	Sequence of genEquip PmTdm Entry	N/A	1.3.6.1.4.1.2281.10.6.3.5.1.1

Parameter	Description	Syntax	Access	OID
genEquip PmTdm Type	Indicates which PM table to access (15 min, Current 15 min, 24 hr, Current 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.1
genEquip PmTdm Interval	Index of a specific PM interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.2
genEquip PmTdm ES	Number of seconds during which errors occurred for the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.3
genEquip PmTdm SES	Number of seconds during which severe errors occurred for the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.4
genEquip PmTdm UAS	Number of seconds that the signal was unavailable during the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.5
genEquip PmTdm BBE	Number of background block errors.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.6
genEquip PmTdm IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.5.1.1.7

3.5.3.5 genEquipPmSdh

Parameter	Description	Syntax	Access	OID
genEquip PmSdh Table	SDH performance monitoring data table.	Sequence of genEquip SdhEntry	N/A	1.3.6.1.4.1.2281.10.6.3.6.1

genEquipPmSdhTable

Table indexes: genEquipPmSdhPmType, ifIndex, genEquipPmSdhInterval

Parameter	Description	Syntax	Access	OID
genEquip PmSdh Entry	SDH performance monitoring data table entry.	Sequence of genEquip SdhEntry	N/A	1.3.6.1.4.1.2281.10.6.3.6.1.1
genEquip PmSdh PmType	Indicates which PM table to access (15 min, Current 15 min, 24 hr, Current 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.1
genEquip PmSdh Interval	Index of a specific PM interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.2
genEquip PmSdh ES	Error seconds for the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.3
genEquip PmSdh SES	Counts number of error seconds within the STM-1/OC-3 interface for the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.4
genEquip PmSdh EB	Error block on STM-1/OC-3 PM.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.5
genEquip PmSdh BBE	Background error block STM-1 or code violation line (CVL) PM.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.6
genEquip PmSdh IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.6.1.1.7

3.5.3.6 genEquipPmTrails

Parameter	Description	Syntax	Access	OID
genEquip PmTrails	TDM trail end point performance	Sequence of genEquip	N/A	1.3.6.1.4.1.2281.10.6.3.7.1

EndPoint Table	monitoring table.	Pm Trails EndPoint Entry		

genEquipPmTrailsEndPointTable

Table indexes: genEquipPmTrailsEndPointPmType, genEquipPmTrailsEndPointId, genEquipPmTrailsEndPointEPId, genEquipPmTrailsEndPointInterval

Parameter	Description	Syntax	Access	OID
genEquip PmTrails EndPoint Entry	TDM trail end point performance monitoring table entry.	Sequence of genEquip Pm Trails EndPoint Entry	N/A	1.3.6.1.4.1.2281.10.6.3.7.1.1
genEquip PmTrails EndPoint PmType	Indicates which PM table to access (15Min , Current 15 min, 24 hr, Current 24 hr).	Integer PM 15 min current [1] PM 15 min [2] PM 24 hour current [3] PM 24 hour [4]	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.1
genEquip PmTrails EndPoint Id	Trail ID.	Display string	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.2
genEquip PmTrails EndPoint EPId	End point number for this trail. If the trail is protected, there will be two end points for the trail (primary path and the secondary path).	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.3
genEquip PmTrails EndPoint Interval	Trail end point PM interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.4
genEquip PmTrails EndPoint ES	Number of seconds during which errors occurred for the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.5
genEquip PmTrails	Number of seconds during which severe	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.6

EndPoint SES	errors occurred for the selected PM interval.			
genEquip PmTrails EndPoint UAS	Number of seconds that the signal was unavailable for the selected PM interval.	Integer (seconds)	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.7
genEquip PmTrails EndPoint BBE	Number of background block errors.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.8
genEquip PmTrails EndPoint NoOfSwitches	Number of SNCP switches (between the primary and secondary end points) that the trail had during the monitored interval.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.9
genEquip PmTrails EndPoint ActivePathCounts	Number of active paths used per second.	Integer	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.10
genEquip PmTrails EndPoint IDF	The Invalid Data Flag (IDF) value indicates the integrity of the PM data for the selected interval.	Integer Integrity [0] No Integrity [1]	Read-only	1.3.6.1.4.1.2281.10.6.3.7.1.1.11

3.5.4 genEquipPmStatistics

Parameter	Description	Syntax	Access	OID
genEquip RMON ResetCounters	Clears the values for all of the Ethernet RMON counters.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.6.4.1

3.6 genEquipRadio

Parameter	Description	Syntax	Access	OID
genEquip Radio	Radio parameters	Subfolder	N/A	1.3.6.1.4.1.2281.10.7

Parameter	Description	Syntax	Access	OID
genEquip RadioStatus Table	Radio status table.	Sequence of genEquip RadioStatus Entry	N/A	1.3.6.1.4.1.2281.10.7.1
genEquip RadioCfg Table	Radio configuration table.	Sequence of genEquip RadioCfg Entry	N/A	1.3.6.1.4.1.2281.10.7.2
genEquip RemoteRadio Table	Remote radio configurations table.	Sequence of genEquip RemoteRadio Entry	N/A	1.3.6.1.4.1.2281.10.7.3.1
genEquip Radio MRMC Table	Radio MRMC table.	Sequence of genEquip Radio MRMC Entry	N/A	1.3.6.1.4.1.2281.10.7.4.1
genEquip Radio MRMCScript Table	MRMC script parameters table.	Sequence of genEquip MRMCScriptEntry	N/A	1.3.6.1.4.1.2281.10.7.4.2

3.6.1 genEquipRadioStatusTable

Table indexes: genEquipRadioStatusId

Parameter	Description	Syntax	Access	Objtect ID
genEquip RadioStatus Entry	Radio status table entry.	Sequence of genEquip RadioStatus Entry	N/A	1.3.6.1.4.1.2281.10.7.1.1
genEquip RadioStatus RadioId	Radio ID that serves as the table index.	Radio ID	Read-only	1.3.6.1.4.1.2281.10.7.1.1.1
genEquip RadioStatus MSE	Mean Square Error (MSE) of the Rx signal.	Integer (measured in dB* 100)	Read-only	1.3.6.1.4.1.2281.10.7.1.1.2
genEquip RadioStatus DefectedBlocks	Number of defective radio blocks.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.1.1.3
genEquip RadioStatus BER	Current radio bit rate error (BER).	Integer n1e 3 [2] n1e 4 [3] n1e 5 [4]	Read-only	1.3.6.1.4.1.2281.10.7.1.1.4

genEquip RadioStatus XPI	Cross Polar Interference (XPI) level detected.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.1.1.5
genEquip RadioStatus XPICEnabled	Enables / disables XPIC support for the current script.	Integer Disable [0] Enable [1]	Read-only	1.3.6.1.4.1.2281.10.7.1.1.6

3.6.2 genEquipRadioCfgTable

Table indexes: genEquipRadioCfgId

Parameter	Description	Syntax	Access	OID
genEquip RadioCfg Entry	Radio configuration table entry.	Sequence of genEquip RadioCfg Entry	N/A	1.3.6.1.4.1.2281.10.7.2.1
genEquip RadioCfg Radio Id	Radio ID that serves as the table index.	Radio ID	Read-only	1.3.6.1.4.1.2281.10.7.2.1.1
genEquip RadioCfg LinkID	Radio configuration link ID.	Integer [1-65535]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.2
genEquip RadioCfg MACHeader Compression	Enable or disable MAC header compression.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.3
genEquip RadioCfg ClearCounters	Clear all the radio counters.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.4
genEquip RadioCfg IfLoopback	Starts a loopback test on the radio or on a line interface.	Integer Off [0] Towards System [1]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.5
genEquip RadioCfg ExcessiveBER Threshold	Excessive Bit Error Rate (BER) PM threshold.	Integer n1e 3 [2] n1e 4 [3] n1e 5 [4]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.6
genEquip RadioCfg SignalDegrade Threshold	Signal degrade PM threshold.	Integer n1e 6 [5] n1e 7 [6] n1e 8 [7] n1e 9 [8]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.7

Parameter	Description	Syntax	Access	OID
genEquip RadioCfg Radio Admin	Enable / disable the radio.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.8
genEquip RadioCfg Radio OperationalStatus	Indicates the radio's operational status.	Integer Down [0] Up [1]	Read-only	1.3.6.1.4.1.2281.10.7.2.1.9
genEquip RadioCfg RadioTraffic PriorityScheme	Configures the relative priority of different traffic streams. High-tdm-over-high-ethernet priorities: (1) TDM high priority (2) Ethernet high priority (3) TDM low priority (4) Ethernet low priority. High-Ethernet-over-tdm priorities: (1) Ethernet high priority (2) TDM high priority (3) TDM low priority (4) Ethernet low priority. Tdm-over-ethernet priorities: (1) TDM high priority (2) TDM low priority (3) Ethernet	Integer High-Tdm-over-Ethernet [0] High-Ethernet-over-Tdm [1] High-Tdm-over-high-Ethernet [2]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.10
genEquip RadioCfg Radio HiPriority EthernetBW	Configures the amount of bandwidth reserved for high-priority Ethernet. The maximum possible capacity is given by genEquip RadioCfg RadioCurrent AvailableCapacity.	Integer [0-500,000] Must be a number in resolution of 2.048 Mbit/s for E1 systems or 1.544 Mbit/s for T1 systems.	Read-write	1.3.6.1.4.1.2281.10.7.2.1.11

Parameter	Description	Syntax	Access	OID
genEquip RadioCfg Radio MultiRadio Enable	Enables/disables the Multi-Radio feature for this radio. Notice that for the feature to work it must be configured in two adjacent radios (odd and even slots).	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.12
genEquip RadioCfg Radio MultiRadio BlockLocalTraffic	Allows stopping distribution of data to different radios in Multi-Radio mode for debugging purposes.	Integer Do not block this radio [0] Block this radio [1]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.13
genEquip RadioCfg Radio MultiRadio BlockMateTraffic	Allows stopping distribution of data to the radio in the mate IDU in Multi-Radio mode for debugging purposes.	Integer Do not block this radio [0] Block this radio [1]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.14
genEquip RadioCfg Radio CurrentAvailable Capacity	Indicates the maximum possible capacity available for Ethernet. This sets a top limit for amount of high-priority Ethernet bandwidth.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.2.1.15
genEquip RadioCfg Radio MultiRadio ExcessiveBER Admin	Configures whether in Multi-Radio mode data stops being distributed to the radio when there is an excessive BER condition.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.16
genEquip RadioCfg Radio MultiRadio SignalDegrade Admin	Configures whether in Multi-Radio mode data stops being distributed to the radio when there a signal degraded condition.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.17

Parameter	Description	Syntax	Access	OID
genEquip RadioCfg Radio EnAlarmGenOnRsl Degrade	Enable/Disable alarm and trap generation on RSL degradation below user defined threshold. If enabled, trap and alarm will be generated when current RSL level degrades below user defined threshold for 5 subsequent seconds. Alarm will be cleared after RSL level stays above the threshold for at least another 5 seconds.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.18
genEquip RadioCfg AlarmGenRsl NominalLevel	Configures the nominal level [in dBm] for RSL degradation alarm and event generation.	Integer [0 to -100] Units: dBm	Read-write	1.3.6.1.4.1.2281.10.7.2.1.19
genEquip RadioCfg AlarmGenRsl DegredationMargin	Configures the degradation margin [in dB] for alarm and event generation.	Integer [0 to 30] Units: dB	Read-write	1.3.6.1.4.1.2281.10.7.2.1.20
genEquip RadioCfg LinkShutDown OnRadioFailure	Enables / disables initiation of automatic state propagation upon a failure in each one of the radios.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.2.1.21

3.6.3 genEquipRemoteRadioTable

Table indexes: genEquipRemoteRadioId

Parameter	Description	Syntax	Access	OID
genEquip RemoteRadio Entry	Remote radio configurations table entry.	Sequence of genEquip RemoteRadio Entry	N/A	1.3.6.1.4.1.2281.10.7.3.1.1

genEquip RemoteRadio RadioId	Remote radio ID.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.3.1.1.1
genEquip RemoteRadio Remote Communication	Operational status of the remote radio.	Integer Down [0] Up [1]	Read-only	1.3.6.1.4.1.2281.10.7.3.1.1.2
genEquip RemoteRadio RemoteIPAddr	Configures the remote IP address.	IP address	Read-write	1.3.6.1.4.1.2281.10.7.3.1.1.3
genEquip RemoteRadio RemoteRxLevel	Rx level of the remote radio.	Integer (dBm) [199-0]	Read only	1.3.6.1.4.1.2281.10.7.3.1.1.4
genEquip RemoteRadio RemoteForceMax TxLevel	Forces the remote radio to operate at the entered Tx level.	Integer [-50-34]	Read-write	1.3.6.1.4.1.2281.10.7.3.1.1.5
genEquip RemoteRadio RemoteTxFreq	Configures the remote Tx frequency.	Integer (MHz)	Read-write	1.3.6.1.4.1.2281.10.7.3.1.1.6
genEquip RemoteRadio RemoteRxFreq	Configures the remote Rx frequency.	Integer (MHz)	Read-write	1.3.6.1.4.1.2281.10.7.3.1.1.7
genEquip RemoteRadio Remote ATPCReference RxLevel	The RSL reference level for the ATPC mechanism in the remote radio.	Integer [0-199]	Read write	1.3.6.1.4.1.2281.10.7.3.1.1.8
genEquip RemoteRadio Remote FloatingIPAddr	Indicates the floating IP address used in the remote shelf if its main units are in 1+1 protection mode.	IP address	Read-write	1.3.6.1.4.1.2281.10.7.3.1.1.9
genEquip RemoteRadio Remote DefaultGateway	Default gateway of remote NE across this radio link.	IP address	Read-only	1.3.6.1.4.1.2281.10.7.3.1.1.10
genEquip RemoteRadio Remote MostSevereAlarm	Most severe alarm of remote NE across this radio link.	Integer Indeterminate [0] Critical [1] Major [2] Minor [3] Warning [4] Cleared [5]	Read-only	1.3.6.1.4.1.2281.10.7.3.1.1.11

genEquip RemoteRadio Remote SubnetMask	Subnet mask of remote NE across this radio link.	IP address	Read-only	1.3.6.1.4.1.2281.10.7.3.1.1.12
genEquip RemoteRadio RemoteSlotId	The remote radio slot number.	Integer [1-6]	Read-only	1.3.6.1.4.1.2281.10.7.3.1.1.13

3.6.4 genEquipRadioMRMCTable

Table indexes: genEquipRadioMRMCId

Parameter	Description	Syntax	Access	OID
genEquip Radio MRMC Entry	Radio MRMC table entry.	Sequence of genEquip Radio MRMC Entry	N/A	1.3.6.1.4.1.2281.10.7.4.1.1
genEquip Radio MRMC RadioId	Radio ID.	Radio ID	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.1
genEquip Radio MRMC SelectedScriptIndex	Index of the MRMC script. The description of the script is in the genEquip Radio MRMCScript Table.	Integer	Read-write	1.3.6.1.4.1.2281.10.7.4.1.1.2
genEquip Radio MRMC OccupidBandwidth	Actual bandwidth occupied by the radio signal.	Integer (KHz)	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.3
genEquip Radio MRMC OperMode	Indicates the current ACM mode.	Integer Regular mode [0] ACM fixed mode [1] ACM adaptive mode [2]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.4
genEquip Radio MRMC CurrTxProfile	Indicates the current ACM transmitting profile.	Integer [0-16]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.5
genEquip Radio MRMC	Indicates the current modulation for transmission.	Integer [4-1024]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.6

CurrTxQAM				
genEquip Radio MRMC CurrTxBitrate	Indicates the current Tx bit rate.	Integer (Kbps) [1-1,000,000]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.7
genEquip Radio MRMC CurrTxVc	Current number of Tx TDM channels.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.8
genEquip Radio MRMC CurrRxProfile	Indicates the current ACM receiving profile.	Integer [0-16]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.9
genEquip Radio MRMC CurrRxQAM	Indicates the current modulation by the receiver.	Integer [4-1024]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.10
genEquip Radio MRMC CurrRxBitrate	Indicates the current Rx bit rate.	Integer (Kbps) [1-1,000,000]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.11
genEquip Radio MRMC CurrRxVc	Indicates the current number of TDM Rx channels.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.12
genEquip Radio MRMC CurrGrade	Grade of the current script.	Integer Unknown [0] Grade 1 [1] Grade 2 [2] Grade 3 [3]	Read-only	1.3.6.1.4.1.2281.10.7.4.1.1.13
genEquip Radio MRMC EnAlarm OnAcmProfile Degrade	Enable/ disable event and trap generation on ACM profile degrade. If the current radio script supports Adaptive Code Modulation (ACM), when enabled, an event trap will be generated upon Tx ACM profile degradation below the user-defined threshold.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.7.4.1.1.14
genEquip	ACM profile	Integer	Read-write	1.3.6.1.4.1.2281.10.7.4.1.1.15

Radio MRMC RadioAlarm OnAcmProfile DegradeThreshold	threshold for alarm generation. If enabled and an ACM interrupt is received, the timer will be activated when the current profile falls below the user defined threshold. If the profile changed but it is above the threshold, the timer will be stopped and no alarm will be generated.	[1-7]		

3.6.5 genEquipRadioMRMCScriptTable

Table indexes: genEquipRadioMRMCScriptRadioId, genEquipRadioMRMCScriptIndex

Parameter	Description	Syntax	Access	OID
genEquip Radio MRMCScript Entry	MRMC script parameters table entry.	Sequence of genEquip MRMCScriptEntry	N/A	1.3.6.1.4.1.2281.10.7.4.2.1
genEquip Radio MRMCScript RadioId	Index of MRMC script parameters table entry.	Radio ID	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.1
genEquip Radio MRMCScript Index	Index of the MRMC script.	Integer	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.2
genEquip Radio MRMCScript Name	MRMC script name.	Display string	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.3
genEquip Radio MRMCScript OperMode	MRMC script operational mode.	Integer regular-mode [0] acm-fixed-mode [1] acm-adaptive-mode [2]	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.4
genEquip Radio	Profile number of the script.	Integer profile-0 [0]	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.5

MRMCScript Profile		profile-1 [1] profile-2 [2] profile-3 [3] profile-4 [4] profile-5 [5] profile-6 [6] profile-7 [7] profile-8 [8] profile-9 [9] profile-10 [10] profile-11 [11] profile-12 [12] profile-13 [13] profile-14 [14] profile-15 [15]		
genEquip Radio MRMCScript ProfileBitrate	Bit rate of the MRMC profile.	Integer (Kbps) [1-1000000]	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.6
genEquip Radio MRMCScript AdaptivePower	Enables/ disables the adaptive power option.	Integer enable-adaptive-power [0] disable-adaptive-power [1]	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.7
genEquip Radio MRMCScript Reference	Reference class option.	Integer class-2 [0] class-4 [1] class-5b [2] class-6a [3] fcc [4]	Read-only	1.3.6.1.4.1.2281.10.7.4.2.1.8
genEquip Radio MRMCScript MinProfile	Minimum profile restricts the modem to a minimal threshold.	Integer profile-0 [0] profile-1 [1] profile-2 [2] profile-3 [3] profile-4 [4] profile-5 [5] profile-6 [6] profile-7 [7] profile-8 [8] profile-9 [9] profile-10 [10]	Read-write	1.3.6.1.4.1.2281.10.7.4.2.1.9

		profile-11 [11] profile-12 [12] profile-13 [13] profile-14 [14] profile-15 [15]		

3.7 genEquipServices

Parameter	Description	Syntax	Access	OID
genEquip Services	Ethernet and TDM services and synchronization settings.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8
genEquip EthernetSwitch	Ethernet switch commands and parameters	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1
genEquip TdmTrails	TDM trail commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.2
genEquip Synchronization	Synchronization configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.3

3.7.1 genEquipEthernetSwitch

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Cfg	Ethernet switch configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.1
genEquip EthernetSwitch XSTP	Spanning Tree Protocol (STP) commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.2
genEquip EthernetSwitch QoS	QoS commands and parameters	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.3
genEquip EthernetSwitch Lag	LAG port commands and parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.4
genEquip EthernetSwitch Etm	Enhanced traffic manager commands and parameters	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5

3.7.1.1 genEquipEthernetSwitchCfg

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Cfg AppType	Specifies the mode of the Ethernet switch application.	Integer Single pipe [1] Managed switch [2] Metro switch [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.1.1
genEquip EthernetSwitch Cfg VID Table	Switch VLAN table.	Sequence of genEquip EthernetSwitch Cfg VID Entry	N/A	1.3.6.1.4.1.2281.10.8.1.1.2
genEquip EthernetSwitch Cfg PbbteEthertype	PBB-TE Ethertype value, used for QoS classification purposes in ETM.	Integer [0-65,535]	Read-write	1.3.6.1.4.1.2281.10.8.1.1.3
genEquip EthernetSwitch Cfg ProviderEthertype	Ethertype of the provider VLANS (S-tag). This parameter configures the Marvell switch. It applies to all Ethernet ports.	Integer 0x8100 0x9100 0x88A8 0x9200	Read-write	1.3.6.1.4.1.2281.10.8.1.1.4

genEquipEthernetSwitchCfgVIDTable

Table index: genEquipEthernetSwitchCfgVIDIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch CfgVID Entry	Switch VLAN table entry.	Sequence of genEquip EthernetSwitch Cfg VID Entry	N/A	1.3.6.1.4.1.2281.10.8.1.1.2.1
genEquip EthernetSwitch CfgVID Index	Index of the switch VLAN table entry.	Integer [0-4095]	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.1
genEquip EthernetSwitch CfgVID Name	Configures the VLAN name.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.2
genEquip EthernetSwitch	Configures the VLAN state.	Integer Suspend [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.3

CfgVID State		Active [2]		
genEquip EthernetSwitch CfgVID MemberPorts	Indicates in which ports this VLAN is allowed.	Display string Port numbers are separated by spaces.	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.4
genEquip EthernetSwitch CfgVID EVCID	Defines a name for the Ethernet service running over this VLAN.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.5
genEquip EthernetSwitch CfgVID EVCDescription	Allows adding a description for the Ethernet service running over this VLAN.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.6
genEquip EthernetSwitch CfgVID RowStatus	Configures the row status of the VLAN table.	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.1.1.2.1.30

3.7.1.2 genEquipEthernetSwitchXSTP

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch XSTP Protocol	Specifies the STP protocol.	Integer disable [0] stp [1] rstp [2] ring-rstp [3] mstp [4] ring-mstp [5]	Read-write	1.3.6.1.4.1.2281.10.8.1.2.1
genEquip EthernetSwitch XSTP Params	STP configuration settings.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.2.2

genEquipEthernetSwitchXSTPParams

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch XSTP	RSTP bridge ID.	Display string	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.1

BridgeID				
genEquip EthernetSwitch XSTP RootID	RSTP root ID.	Display string	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.2
genEquip EthernetSwitch XSTP RootPath	RSTP root path cost.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.3
genEquip EthernetSwitch XSTP BridgeRole	RSTP bridge role.	Integer root-bridge [0] designated-bridge [1]	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.4
genEquip EthernetSwitch XSTP CfgPriority	RSTP bridge priority.	Integer [0-61440]	Read-write	1.3.6.1.4.1.2281.10.8.1.2.2.5
genEquip EthernetSwitch XSTP ParamsEthernet PortsTable	RSTP ports status table.	Sequence of genEquip EthernetSwitch XSTPParams Ethernet PortsEntry	N/A	1.3.6.1.4.1.2281.10.8.1.2.2.6

genEquipEthernetSwitchXSTPParamsEthernetPortsTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch XSTPParams Ethernet PortsEntry	RSTP port status table entry.	Sequence of genEquip EthernetSwitch XSTPParams Ethernet PortsEntry	N/A	1.3.6.1.4.1.2281.10.8.1.2.2.6.1
genEquip EthernetSwitch XSTPParams Ethernet PortsState	State of the RSTP port.	Integer Discarding [0] Listening [1] Learning [2] Forwarding [3] Blocking [4]	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.6.1.1
genEquip EthernetSwitch XSTPParams Ethernet PortsRole	Role of the RSTP port.	Integer Master port [0] Alternate [1] Root port [2]	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.6.1.2

		Designated [3] Disabled [4] Backup [5]		
genEquip EthernetSwitch XSTPParams Ethernet PortsPathCost	Configures the RSTP path cost.	Integer [1-200,000,000]	Read-write	1.3.6.1.4.1.2281.10.8.1.2.2.6.1.3
genEquip EthernetSwitch XSTPParams Ethernet PortsPriority	Configures the RSTP port priority.	Integer [0-240]	Read-write	1.3.6.1.4.1.2281.10.8.1.2.2.6.1.4
genEquip EthernetSwitch XSTPParams Ethernet DesPathCost	RSTP designated path cost from this local port to the root port.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.2.2.6.1.5
genEquip EthernetSwitch XSTPParams Ethernet EdgePort	Configures if this port is an Edge port or not.	Integer No [0] Yes [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.2.2.6.1.6

3.7.1.3 genEquipEthernetSwitchQoS

Table indexes: genEquipEthernetSwitchVlanPbitRemapPbit, ifIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch QoS Table	QoS configuration table.	Sequence of genEquip EthernetSwitch Qos Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.1
genEquip EthernetSwitch VlanPbitRemap Table	Allows remapping of VLAN-priority bit values 0-7.	Sequence of genEquip EthernetSwitch VlanPbitRemap Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.2
genEquip EthernetSwitch Qos VlanIDToQueue Table	VLAN ID to queue mapping table.	Sequence of genEquip EthernetSwitch Qos VlanIDToQueue Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.3
genEquip EthernetSwitch	Configures the IP priority options and	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.3.4

Qos IPPbits	the queue for the Quality of Service priority bits (QoS Pbits).			
genEquip EthernetSwitch Qos VLANPbits Table	VLAN P-bit to queue mapping table.	Sequence of genEquip EthernetSwitch Qos VlanPbits Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.5
genEquip EthernetSwitch Qos QueueWeights Table	Queue weights mapping table.	Sequence of genEquip EthernetSwitch Qos QueueWeights Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.6
genEquip EthernetSwitch Qos PolicerName Table	Policer configuration table.	Sequence of genEquip EthernetSwitch Qos PolicerName Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.7
genEquip EthernetSwitch Qos PolicerList Table	Policer class list table.	Sequence of genEquip EthernetSwitch Qos PolicerList Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.8
genEquip EthernetSwitch Qos StaticMac Table	Static MAC forwarding table.	Sequence of genEquip EthernetSwitch Qos StaticMac Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.9

genEquipEthernetSwitchQoSTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos Entry	QoS configuration table entry.	Sequence of genEquip EthernetSwitch Qos Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.1.1
genEquip EthernetSwitch Qos	First classification criteria. This is the first	Integer Disable [0] QueueDecision [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.1

FirstCrit	criteria which will be used to evaluate incoming frames.	Causes classification by defined static MAC address. PbitOverride [2] Causes classification by P-bits. QueueandPbitOverride [3] Causes classification by defined static MAC address, and changes the P-bits accordingly.		
genEquip EthernetSwitch Qos SecondCrit	Second classification criteria.	Integer Disable [0] Queue Decision [1] Causes classification by defined VLAN to queue mapping. Pbit Override [2] Causes classification by P-bits. Queue and Pbit Override [3] Overrides classification by defined VLAN to queue mapping, and changes the P-bits accordingly.	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.2
genEquip EthernetSwitch Qos ThirdCrit	Third classification criteria.	Integer ipTosPriority [0] Causes classification by defined IP TOS to queue mapping only. vlanPbitsPriority [1] Causes classification by P-bits only. ipTOSOverVlanPbitsPriority [2]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.3

		Causes classification by IP TOS and then by P-bits. vlanPbitsOverIpTos Priority [3] Causes classification by P-bits and then by IP TOS. portPriority [4] Causes port-based classification according to port priority.		
genEquip EthernetSwitch Qos DefClassification	Configures default classification for frame that matches the above criteria. Choosing the first option classifies this frame as first criteria.	Integer First [0] Second [1] Third [2] Fourth [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.4
genEquip EthernetSwitch Qos EgressSched	Egress scheduler options.	Integer allQueuesStrict [0] fourthQueueStrict [1] fourthThirdQueues Strict [2] allQueuesHrr [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.5
genEquip EthernetSwitch Qos EgressShaper	Enables or disables egress shaping.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.6
genEquip EthernetSwitch Qos ShaperRate	Configures the egress shaper rate.	Integer [64-1,000,000]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.7
genEquip EthernetSwitch Qos IngressPolicer	Ingress policer (rate limiting) name associated with this port. The policer name is defined in: genEquip EthernetSwitch Qos	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.3.1.1.8

	PolicerNameName			

genEquipEthernetSwitchVlanPbitRemapTable

Table indexes: genEquipEthernetSwitchVlanPbitRemapPbit, ifIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch VlanPbitRemap Entry	Vlan P-bit remap table entry.	Sequence of genEquip EthernetSwitch VlanPbitRemap Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.2.1
genEquip EthernetSwitch VlanPbitRemap Pbit	Ingress P-bits value.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.3.2.1.1
genEquip EthernetSwitch VlanPbitRemap RemappedPbit	The remapped P-bit.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.3.2.1.2

genEquipEthernetSwitchQoSVlanIDToQueueTable

Table index: genEquipEthernetSwitchCfgVIDIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos VlanIDToQueue Entry	VLAN ID to queue mapping table entry.	Sequence of genEquip EthernetSwitch Qos VlanIDToQueue Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.3.1
genEquip EthernetSwitch Qos VlanIDToQueue Queue	Queue for the VLAN.	Integer first-queue [0] second-queue [1] third-queue [2] fourth-queue [3] none [4]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.3.1.1

genEquipEthernetSwitchQoSIPPbits

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos IPPbits Prio	Configures the IP priority options.	Integer ipPrecedence [0] ipv4TOSIPv6 [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.4.1

genEquip EthernetSwitch Qos IPPbits Table	IP bits to queue mapping table.	Sequence of genEquip EthernetSwitch Qos QoSIPbits Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.4.2

genEquipEthernetSwitchQoSIPPbitsTable

Table index: genEquipEthernetSwitchQoSIPPbitsId

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos QoSIPbits Entry	IP bits to queue mapping table entry.	Sequence of genEquip EthernetSwitch Qos QoSIPbits Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.4.2.1
genEquip EthernetSwitch Qos QoSIPbits Id	The P-bit number.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.3.4.2.1.1
genEquip EthernetSwitch Qos QoSIPbits Queue	Configures the queue for the selected P-bit.	Integer first-queue [0] second-queue [1] third-queue [2] fourth-queue [3] none [4]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.4.2.1.2

genEquipEthernetSwitchQoSVLANPbitsTable

Table index: genEquipEthernetSwitchQoSVlanPbitsId

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos VLANPbits Entry	VLAN P-bit to queue mapping table entry.	Sequence of genEquip EthernetSwitch Qos VlanPbits Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.5.1
genEquip EthernetSwitch Qos VLANPbits Id	Index of a VLAN P-bit to queue mapping table entry (the VLAN's P-bit).	Integer [1-8]	Read-only	1.3.6.1.4.1.2281.10.8.1.3.5.1.1
genEquip	The mapped queue	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.3.5.1.2

EthernetSwitch Qos VLANPbits Queue	for the corresponding VLAN.	first-queue [0] second-queue [1] third-queue [2] fourth-queue [3] none [4]		

genEquipEthernetSwitchQoSQueueWeightsTable

Table index: genEquipEthernetSwitchQoSQueueWeightsId

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos QueueWeights Entry	Queue weights mapping table entry.	Sequence of genEquip EthernetSwitch Qos QueueWeights Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.6.1
genEquip EthernetSwitch Qos QueueWeights Id	Index of queue weights mapping table entry.	Integer [1-4]	Read-only	1.3.6.1.4.1.2281.10.8.1.3.6.1.1
genEquip EthernetSwitch Qos QueueWeights Queue	The queue number	Integer first-queue [0] second-queue [1] third-queue [2] fourth-queue [3] none [4]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.6.1.2
genEquip EthernetSwitch Qos QueueWeights Weight	The queue weight	Integer [1-32]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.6.1.3

genEquipEthernetSwitchQoSPolicerNameTable

Table index: genEquipEthernetSwitchQoSPolicerNameId

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos PolicerName Entry	Policer configuration table entry.	Sequence of genEquip EthernetSwitch Qos PolicerName Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.7.1
genEquip	Index of a	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.3.7.1.1

EthernetSwitch Qos PolicerName Id	configured policer table entry (the policer ID).			
genEquip EthernetSwitch Qos PolicerName Name	Configures the name for the policer.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.3.7.1.2
genEquip EthernetSwitch Qos PolicerName RowStatus	Policer row status	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.7.1.3

genEquipEthernetSwitchQoSPolicerListTable

Table indexes: genEquipEthernetSwitchQoSPolicerListId, genEquipEthernetSwitchQoSPolicerNameId

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos PolicerList Entry	Policer class list table entry.	Sequence of genEquip EthernetSwitch Qos PolicerList Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.8.1
genEquip EthernetSwitch Qos PolicerList Id	Index of the policer class list table entry (the policer class list ID).	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.3.8.1.1
genEquip EthernetSwitch Qos PolicerList Name	Configures the class name for the policer.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.3.8.1.2
genEquip EthernetSwitch Qos PolicerList ClassName	Configures the class name for the policer list.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.1.3.8.1.3
genEquip EthernetSwitch Qos	The mapped queue for the corresponding	Integer Unknown unicast	Read-write	1.3.6.1.4.1.2281.10.8.1.3.8.1.4

PolicerList TrafficType	VLAN.	[1] Unknown multicast [2] Broadcast [3] Multicast [5] Unicast [6] ARP [8] TCP data [9] TCP control [10] UDP [11] No TCP UDP [12] First priority [13] Second priority [14] Third priority [15] Fourth priority [16] All traffic [17]		
genEquip EthernetSwitch Qos PolicerList CIR	Configures the Committed Information Rate (CIR) value.	Integer (Kbps)	Read-write	1.3.6.1.4.1.2281.10.8.1.3.8.1.5
genEquip EthernetSwitch Qos PolicerList CBS	Configures the Committed Burst Size (CBS) value.	Integer (bytes)	Read-write	1.3.6.1.4.1.2281.10.8.1.3.8.1.6
genEquip EthernetSwitch Qos PolicerList RowStatus	Configures the row status of the policer list table.	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.8.1.30

genEquipEthernetSwitchQoSStaticMacTable

Table index: genEquipEthernetSwitchQoSStaticMacId

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Qos StaticMac Entry	Static MAC forwarding table entry.	Sequence of genEquip EthernetSwitch Qos StaticMac Entry	N/A	1.3.6.1.4.1.2281.10.8.1.3.9.1

genEquip EthernetSwitch Qos StaticMac Id	Index of a static MAC forwarding table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.3.9.1.1
genEquip EthernetSwitch Qos StaticMac Addr	Configures the static MAC address.	Octet string	Read-write	1.3.6.1.4.1.2281.10.8.1.3.9.1.2
genEquip EthernetSwitch Qos StaticMac VlanId	Configures the VLAN ID for this MAC.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.3.9.1.3
genEquip EthernetSwitch Qos StaticMac ForwardTo	Configures the port number that is forwarded to - starting from 1.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.3.9.1.4
genEquip EthernetSwitch Qos StaticMac Priority	Assigns a priority to the MAC address.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.3.9.1.5
genEquip EthernetSwitch Qos StaticMac RowStatus	Configures the row status of the static MAC table.	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.1.3.9.1.30

3.7.1.4 genEquipEthernetSwitchLag

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Lag DistFunction	Configures the LAG distribution function.	Integer Simple XOR [0] Hash [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.4.1
genEquip EthernetSwitch Lag MaxNumber	Maximum number of LAG port groups.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.4.2

3.7.1.5 genEquipEthernetSwitchEtm

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Admin	Enable / disable the Enhanced Traffic Manager feature.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.1
genEquip EthernetSwitch Etm PTP OptimizedTransport Mode Admin	Enable / disable Precision Time Protocol. Upon enabling all the packets classified to the 8th queue will bypass the scheduler and will be sent directly to the radio frame.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.2
genEquip EthernetSwitch Etm CountersClear	Reset a selected module's counters.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.3
genEquip EthernetSwitch Etm Classifier	Packet classification tables and control parameters.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6
genEquip EthernetSwitch Etm Queues	Queue configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.9
genEquip EthernetSwitch Etm Wred	WRED configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.10
genEquip EthernetSwitch Etm Scheduler	Scheduler configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.12
genEquip EthernetSwitch Etm Shaper	Egress shaper configuration.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.13
genEquip EthernetSwitch Etm Statistics	Ethernet traffic statistics.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.14

genEquipEthernetSwitchEtmClassifier

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByMac	CoS classification by destination MAC address.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.1
genEquip EthernetSwitch Etm Classifier ByUdpPort	CoS classification by UDP port.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.2
genEquip EthernetSwitch Etm Classifier ByKnownPduMac	CoS classification by Known PDU MAC addresses.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.4
genEquip EthernetSwitch Etm Classifier ByVlanPbits	CoS classification by VLAN P-bits.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.6
genEquip EthernetSwitch Etm Classifier ByDscp	CoS classification by IP DSCP bits.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.7
genEquip EthernetSwitch Etm Classifier ByMplsExp	CoS classification by MPLS experimental bits	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.8
genEquip EthernetSwitch Etm Classifier ByDefault CosColor	Default CoS and color classification.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.9
genEquip EthernetSwitch Etm Classifier ByCosToQueue	CoS to queue mapping.	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.10
genEquip EthernetSwitch Etm	In-band management classification	Subfolder	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.12

Classifier InbandMgmtQoS				

genEquipEthernetSwitchEtmClassifierByMac

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm ClassifierByMac Admin	Enable / disable classification by destination MAC addresses.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.1.1
genEquip EthernetSwitch Etm ClassifierByMac Table	CoS and color classification by destination MAC address table.	Sequence of genEquip EthernetSwitch Etm ClassifierByMac Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.1.2

genEquipEthernetSwitchEtmClassifierByMacTable

Table index: genEquipEthernetSwitchEtmClassifierByMacIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByMac Entry	CoS and color classification by destination MAC address table entry.	Sequence of genEquip EthernetSwitch Etm ClassifierByMac Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.1.2.1
genEquip EthernetSwitch Etm Classifier ByMac Index	The index for classifier by MAC destination addresses table entries.	Integer [1-16]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.1.2.1.1
genEquip EthernetSwitch Etm Classifier ByMac Value	MAC address value for a CoS classification by MAC table entry.	MAC address	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.1.2.2
genEquip EthernetSwitch Etm Classifier ByMac Cos	Color value for a CoS classification by MAC table entry.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.1.2.3
genEquip	CoS value for a	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.1.2.4

EthernetSwitch Etm Classifier ByMac Color	CoS classification by MAC table entry.	Green [0] Yellow [1]		
genEquip EthernetSwitch Etm Classifier ByMac RowStatus	Row status	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.1.2.30

genEquipEthernetSwitchEtmClassifierUdpPort

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByUdpPort Admin	Enable / disable CoS and color classification by UDP source and/or destination ports.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.1
genEquip EthernetSwitch Etm Classifier ByUdpPort Table	Table for CoS and color classification by UDP ports.	Sequence of genEquip EthernetSwitch Etm ClassifierByUdpPort Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.2.2

genEquipEthernetSwitchEtmClassifierByUdpPortTable

Table index: genEquipEthernetSwitchEtmClassifierByUdpPortIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByUdpPort Entry	UDP source and destination ports table entries.	Sequence of genEquip EthernetSwitch Etm ClassifierByUdpPort Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1
genEquip EthernetSwitch Etm Classifier ByUdpPort Index	Index of the UDP source and destination ports table entry.	Integer [1-8]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.1
genEquip	UDP source port	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.2

EthernetSwitch Etm Classifier ByUdpPort SrcPort	value for CoS Classification by UDP ports table entry.	[0-0xffff]		
genEquip EthernetSwitch Etm Classifier ByUdpPort DestPort	UDP destination port value for CoS classification by UDP ports table entry.	Integer [0-0xffff]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.3
genEquip EthernetSwitch Etm Classifier ByUdpPort Cos	CoS value for CoS classification by UDP ports table entry.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.4
genEquip EthernetSwitch Etm Classifier ByUdpPort Color	Color value for CoS classification by UDP ports table entry.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.5
genEquip EthernetSwitch Etm Classifier ByUdpPort Validity	Validity value for CoS classification by UDP ports table entry.	Integer Unused [0] Src [1] Dest [2] Both [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.6
genEquip EthernetSwitch Etm Classifier ByUdpPort RowStatus	Row status	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.2.2.1.30

genEquipEthernetSwitchEtmClassifierByKnownPduMac

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByKnownPduMac Admin	Enable/Disable CoS and color classification by known PDU MAC addresses.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.4.1

genEquip EthernetSwitch Etm Classifier ByKnownPduMac Table	Table for CoS and color classification by known PDU MAC addresses.	Sequence of genEquip EthernetSwitch Etm Classifier ByKnownPduMac Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.4.2

genEquipEthernetSwitchEtmClassifierByKnownPduMacTable

Table index: genEquipEthernetSwitchEtmClassifier ByKnownPduMacIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByKnownPduMac Entry	CoS and color classification by known PDU MAC addresses table entries.	Sequence of genEquip EthernetSwitch Etm Classifier ByKnownPduMac Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.4.2.1
genEquip EthernetSwitch Etm Classifier ByKnownPduMac Index	Index value of CoS and color classification by known PDU MAC addresses table entries.	Integer [1-66]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.4.2.1.1
genEquip EthernetSwitch Etm Classifier ByKnownPduMac Address	CoS value for CoS classification by known PDU table entry.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.4.2.1.2
genEquip EthernetSwitch Etm Classifier ByKnownPduMac Cos	CoS value for CoS classification by known PDU table entry.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.4.2.1.3
genEquip EthernetSwitch Etm Classifier ByKnownPduMac Color	Color value for CoS classification by known PDU table entry.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.4.2.1.4
genEquip EthernetSwitch Etm Classifier	Validity value for CoS classification by known PDU table entry.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.4.2.1.5

ByKnownPduMac Validity				

genEquipEthernetSwitchEtmClassifierByVlanPbits

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByVlanPbits Admin	Enable /Disable CoS and color classification by VLAN P-bits and CFI/DEI bit.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.6.1
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanTable	CoS and color classification by VLAN S-tag P-bits and DEI bit table.	Sequence of genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanEntry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.6.2

genEquipEthernetSwitchEtmClassifierByVlanPbitsVlanTable

Table index: genEquipEthernetSwitchEtmClassifierByVlanPbitsVlanIndex

Parameter	Description	Syntax	Acces	OID
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanEntry	CoS and color classification by VLAN S-tag P-bits and DEI bit table entry.	Sequence of genEquip EthernetSwitch Etm ClassifierByVlanPbits Vlan Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.6.2.1
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanIndex	Index of CoS and color classification by VLAN S-tag P-bits and DEI bit table entries.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.6.2.1.1
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanPriority	P-bit value for regular classification prioritization.	Integer [0-7]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.6.2.1.2

Parameter	Description	Syntax	Acces	OID
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanDei	DEI value for regular classification prioritization by S-tag VLAN.	Integer [0-1]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.6.2.1 .3
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanCos	CoS value for regular classification prioritization by S-tag VLAN.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.6.2.1 .4
genEquip EthernetSwitch Etm Classifier ByVlanPbits VlanColor	Color value for regular classification prioritization by S-tag VLAN.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.6.2.1 .5

genEquipEthernetSwitchEtmClassifierByDscp

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByDscp Admin	Enable/Disable Cos and color classification by DSCP/TOS bits.	Integer Enable [2] Disable (3)	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.7.1
genEquip EthernetSwitch Etm Classifier ByDscp Table	CoS and color classification by DSCP/TOS bits table.	Sequence of genEquip EthernetSwitch Etm ClassifierByDscp Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.7.2

genEquipEthernetSwitchEtmClassifierByDscpTable

Table index: genEquipEthernetSwitchEtmClassifierByDscpValue

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByDscp Value	DSCP/TOS bits mapping value.	Integer [0-63]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.7.2.1.1

genEquip EthernetSwitch Etm Classifier ByDscp Cos	CoS value for regular classification prioritization by DSCP tag.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.7.2.1.2
genEquip EthernetSwitch Etm Classifier ByDscp Color	Color value for regular classification prioritization by DSCP tag.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.7.2.1.3

genEquipEthernetSwitchEtmClassifierByMplsExp

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByMplsExp Admin	Enable /Disable CoS and color classification by MPLS experimental bits.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.8.1
genEquip EthernetSwitch Etm Classifier ByMplsExp Table	CoS and color classification by MPLS experimental bits table.	Sequence of genEquip EthernetSwitch Etm Classifier ByMplsExp Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.8.2

genEquipEthernetSwitchEtmClassifierByMplsExpTable

Table index: genEquipEthernetSwitchEtmClassifierByMplsExpValue

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByMplsExp Entry	CoS and color classification by MPLS experimental bits table entries.	Sequence of genEquip EthernetSwitch Etm ClassifierByMplsExp Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.8.2.1
genEquip EthernetSwitch Etm Classifier ByMplsExp Value	Index value of CoS and color classification by MPLS experimental bits table entry.	Integer [0-7]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.8.2.1.1

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByMplsExp Cos	Value for regular classification prioritization by MPLS.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.8.2.2
genEquip EthernetSwitch Etm Classifier ByMplsExp Color	Color value for regular classification prioritization by MPLS.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.8.2.3

genEquipEthernetSwitchEtmClassifierByDefaultCosColor

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByDefaultCos	Default CoS classification.	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.9.1
genEquip EthernetSwitch Etm Classifier ByDefaultColor	Default color classification.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.9.2

genEquipEthernetSwitchEtmClassifierByCosToQueue

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByCosToQueue Table	CoS to queue mapping table.	Sequence of genEquip EthernetSwitch Etm Classifier ByCosToQueue Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.10.1

genEquipEthernetSwitchEtmClassifierByCosToQueueTable

Table index: genEquipEthernetSwitchEtmClassifierByMplsCosToQueueIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier ByCosToQueue Entry	CoS to queue mapping table entries.	Sequence of genEquip EthernetSwitch Etm Classifier ByCosToQueue Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.6.10.1.1
genEquip EthernetSwitch Etm Classifier ByCosToQueue Index	Index of CoS to queue mapping table entries.	Integer [0-7]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.10.1.1.1
genEquip EthernetSwitch Etm Classifier ByCosToQueue Cos	CoS value for mapping CoS to a queue.	Integer [0-7]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.6.10.1.1.2
genEquip EthernetSwitch Etm Classifier ByCosToQueue Value	Queue value for CoS to queue mapping table entry.	Integer [1-8]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.10.1.1.3

genEquipEthernetSwitchEtmClassifierInbandMgmtQoS

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Classifier InbandMgmt Admin	Enable / disable classification by in-band management.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.12.1
genEquip EthernetSwitch Etm Classifier InbandMgmt VlanId	Inband management VLAN ID.	Integer [0-4090]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.12.2
genEquip EthernetSwitch	In-band management class	Integer [0-7]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.12.3

Etm Classifier InbandMgmt Cos	of service classification value.			
genEquip EthernetSwitch Etm Classifier InbandMgmt Color	In-band management color classification value.	Integer Green [0] Yellow [1]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.6.12.4

genEquipEthernetSwitchEtmQueues

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Queues Table	Queue sizes table.	Sequence of genEquip EthernetSwitch Etm Queues Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.9.1

genEquipEthernetSwitchEtmQueuesTable

Table index: genEquipEthernetSwitchEtmQueuesIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Queues Entry	Queue sizes table entries.	Sequence of genEquip EthernetSwitch Etm Queues Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.9.1.1
genEquip EthernetSwitch Etm Queues Index	Index of queue sizes table entries.	Integer [0-7]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.9.1.1.1
genEquip EthernetSwitch Etm Queues Size	Sets the queue size.	Integer kbit-0 [0] kbit-500 [1] kbit-1000 [2] kbit-2000 [3] kbit-4000 [4]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.9.1.1.2

genEquipEthernetSwitchEtmWred

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Wred Admin	Enable / Disable WRED	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.1
genEquip EthernetSwitch Etm WredThresholds Table	WRED thresholds per queue table.	Sequence of genEquip EthernetSwitch Etm WredThresholds Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.10.2

genEquipEthernetSwitchEtmWredThresholdsTable

Table index: genEquipEthernetSwitchEtmWredQueuesIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm WredThresholds Entry	WRED thresholds per queue table entries.	Sequence of genEquip EthernetSwitch Etm Wred Thresholds Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.10.2.1
genEquip EthernetSwitch Etm Wred QueuesIndex	Index of WRED thresholds per queue table entries.	Integer [0-7]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.1
genEquip EthernetSwitch Etm WredThresholds GreenThLow	WRED green low threshold. Defines the queue level point that the mechanism should start checking if to drop the frame.	Integer (Kbytes) [0-4000]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.2
genEquip EthernetSwitch Etm WredThresholds GreenThHigh	WRED green high threshold. Defines the queue level of occupancy point that the WRED must drop all arriving colored frames.	Integer (Kbytes) [0-4000]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.3
genEquip EthernetSwitch	WRED yellow low threshold. Defines	Integer	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.4

Etm WredThresholds YellowThLow	the queue level point that the mechanism should start checking if to drop the frame.	(Kbytes) [0-4000]		
genEquip EthernetSwitch Etm WredThresholds YellowThHigh	WRED yellow high threshold. Defines the queue level of occupancy point that the WRED must drop all arriving colored frames.	Integer (Kbytes) [0-4000]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.5
genEquip EthernetSwitch Etm WredThresholds GreenMaxDrop	WRED green max drop threshold – the maximum drop probability (in percent based units).	Integer [0-100]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.6
genEquip EthernetSwitch Etm WredThresholds YellowMaxDrop	WRED yellow max drop threshold – the maximum drop probability (in percent based units).	Integer [0-100]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.10.2.1.7

genEquipEthernetSwitchEtmScheduler

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Scheduler Quantum	WFQ Quantum for credit calculation in bytes.	64 128 256 512	Read-write	1.3.6.1.4.1.2281.10.8.1.5.12.1
genEquip EthernetSwitch Etm SchedulerConfig Table	Priority and weight scheduler configuration table.	Sequence of genEquip EthernetSwitch Etm Scheduler Config Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.12.2

genEquipEthernetSwitchEtmSchedulerConfigTable

Table index: genEquipEthernetSwitchEtmSchedulerConfigQueueIndex

Parameter	Description	Syntax	Access	OID
genEquip	Priority and weight	Sequence of	N/A	1.3.6.1.4.1.2281.10.8.1.5.12.2.1

EthernetSwitch Etm SchedulerConfig Entry	scheduler configuration table entries.	genEquip EthernetSwitch Etm SchedulerConfig Entry		
genEquip EthernetSwitch Etm SchedulerConfig QueueIndex	Index of priority and weight scheduler configuration table entries.	Integer [1-8]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.12.2.1.1
genEquip EthernetSwitch Etm SchedulerConfig Priority	Strict priority of each queue.	Integer [1-4] 1=lowest priority. 4=highest priority.	Read-write	1.3.6.1.4.1.2281.10.8.1.5.12.2.1.2
genEquip EthernetSwitch Etm SchedulerConfig Weight	WFQ Weights for each queue	Integer [0-15]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.12.2.1.3

genEquipEthernetSwitchEtmShaper

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Shaper GlobalAdmin	Enables/disables shaping globally.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.13.1
genEquip EthernetSwitch Etm ShaperConfig Table	Shaper configuration table. Each shaper is on the egress of a queue.	Sequence of genEquip EthernetSwitch Etm ShaperConfig Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.13.2

genEquipEthernetSwitchEtmShaperConfigTable

Table index: genEquipEthernetSwitchEtmShaperConfigIndex

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm ShaperConfig Entry	Shaper configuration table entry.	Sequence of genEquip EthernetSwitch Etm Shaper Config Entry	N/A	1.3.6.1.4.1.2281.10.8.1.5.13.2.1

genEquip EthernetSwitch Etm ShaperConfig Index	Index of shaper configuration table entry (queue index).	Integer [1-8]	Read-only	1.3.6.1.4.1.2281.10.8.1.5.13.2.1.1
genEquip EthernetSwitch Etm ShaperConfig Admin	Enables/disables the shaping feature per queue.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.13.2.1.2
genEquip EthernetSwitch Etm ShaperConfig Cir	Egress shaper CIR value - the committed rate as given by the user	Integer [0-1000000]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.13.2.1.3
genEquip EthernetSwitch Etm ShaperConfig Cbs	Egress shaper committed burst size value	Integer [0-128000]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.13.2.1.4
genEquip EthernetSwitch Etm ShaperConfig LineComp	Egress shaper line compensation value – transmitted IFG + Preamble. The shaper adds this value to each arriving frame size.	Integer (bytes) [0-255]	Read-write	1.3.6.1.4.1.2281.10.8.1.5.13.2.1.5

genEquipEthernetSwitchEtmStatistics

Parameter	Description	Syntax	Access	OID
genEquip EthernetSwitch Etm Satistics PortTotal BytesTransmitted	The number of bytes transmitted via the port (goes into PM).	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.1
genEquip EthernetSwitch Etm Satistics PortTotal UnicastFrames Transmitted	The number of Unicast frames transmitted to the radio port.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.2
genEquip EthernetSwitch Etm Satistics	The number of Multicast frames transmitted to the	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.3

PortTotal MulticastFrames Transmitted	radio port.			
genEquip EthernetSwitch Etm Satistics PortTotal BroadcastFrames Transmitted	The number of Broadcast frames transmitted to the radio port.	Frames number	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.4
genEquip EthernetSwitch Etm Satistics PortFrames 64octTransmitted	The total number of frames transmitted with a length of exactly 64 Octets.	Frames number	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.5
genEquip EthernetSwitch Etm Satistics PortFrames 65to127 Transmitted	The total number of frames transmitted with a length of 65-127 Octets.	Frames number	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.6
genEquip EthernetSwitch Etm Satistics PortFrames 128to255 Transmitted	The total number of frames transmitted with a length of 128-255 Octets.	Frames number	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.7
genEquip EthernetSwitch Etm Satistics PortFrames 256to511 Transmitted	The total number of frames transmitted with a length of 256-511 octets.	Frames number	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.8
genEquip EthernetSwitch Etm Satistics PortFrames 512to1023 Transmitted	The total number of frames transmitted with a length of 512-1023 Octets.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.9
genEquip EthernetSwitch Etm Satistics	The total number of frames transmitted with a length between 1024 and	Integer	Read-only	1.3.6.1.4.1.2281.10.8.1.5.14.10

PortFrames 1024toMtu Transmitted	MaxTransmitSize octets.			

3.7.2 genEquipTdmTrails

Parameter	Description	Syntax	Access	OID
genEquip TdmTrails Table	TDM trails table.	Sequence of genEquip TdmTrails Entry	N/A	1.3.6.1.4.1.2281.10.8.2.1
genEquip TdmTrails Protected ForceActiveAllCmd	Forces all active trails to the selected configuration.	Integer None [0] Primary trail [1] Secondary trail [2]	Read-write	1.3.6.1.4.1.2281.10.8.2.2
genEquip TdmTrails Protected ForceOperational OrReserved Cmd	Forces all active trails to the selected configuration.	Integer Reserved [0] Operational [1] Idle [30]	Read-write	1.3.6.1.4.1.2281.10.8.2.3
genEquip TdmTrails Protected RevertiveSwitch Timeout	Configures the revertive switch timeout in seconds for revertive protected trails.	Integer (seconds) [0-1800]	Read-write	1.3.6.1.4.1.2281.10.8.2.4
genEquip TdmTrails SwitchCounterClear	This parameter clears the counter for protected switches.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.8.2.5
genEquip TdmTrails DeleteAllTrails	Delete all existing trails.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.8.2.6

3.7.2.1 genEquipTdmTrailsTable

Table index: genEquipTdmTrailsId

Parameter	Description	Syntax	Access	OID
genEquip TdmTrails Entry	TDM trails table entry.	Sequence of genEquip TdmTrails Entry	N/A	1.3.6.1.4.1.2281.10.8.2.1.1
genEquip TdmTrail ID	Trail ID	Display string	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.1

genEquip TdmTrail Descr	Configures the trail description.	Display string	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.2
genEquip TdmTrail Protected	Indicates the trail's protection status.	Integer Unprotected [0] Protected [1] Protected Abr [2]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.3
genEquip TdmTrail AcmPrio	Configures ACM priority of the trail.	Integer Low [0] High [1]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.4
genEquip TdmTrail OperStatus	Configures the status of the TDM trail. Choosing the operational option, the trail is active/enables and sends alarms.	Integer Reserved [0] Operational [1]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.5
genEquip TdmTrail AlarmStatus	The alarm status of the trail active path. The value is a bit map: Id-Mismatch (0x01) Excessive-Ber (0x02) Signal-Degrade-Ber (0x04) Invalid-Trail-Status (0x08) Signal-Failure (0x10) RDI-Detected (0x20)	Integer	Read-only	1.3.6.1.4.1.2281.10.8.2.1.1.6
genEquip TdmTrail SrcSlot	Configures the trail source slot number.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.7
genEquip TdmTrail SrcType	Configures the source interface of the trail.	Integer unknown[-1] line [0] radio [1] stm-1-oc-3 [2] sync [4]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.8
genEquip TdmTrail SrcNum	Configures the interface number.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.9
genEquip TdmTrail Dest1Slot	Configures the trail slot destination.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.10
genEquip TdmTrail	Configures the trail interface type	Integer unknown[-1] line [0]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.11

Dest1Type	destination.	radio [1] stm-1-oc-3 [2] sync [4]		
genEquip TdmTrail Dest1Num	Configures the interface number.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.12
genEquip TdmTrail Dest2Slot	Configures the secondary slot number which is used when protection is enabled.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.13
genEquip TdmTrail Dest2Type	Configures the secondary interface type which is used when protection is enabled.	Integer Line [0] Radio [1] STM-1 [2] Chain [3] Sync [4]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.14
genEquip TdmTrail Dest2Num	Configures the secondary interface number which is used when protection is enabled.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.15
genEquip TdmTrail Protected ForceActive	Forces the IDU to one of the following configurations.	Integer None [0] Primary trail [1] Secondary trail [2] Idle (30)	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.16
genEquip TdmTrail Protected ActiveTrail	Indicates which trail is active.	Integer none [0] primary [1] secondary [2]	Read-only	1.3.6.1.4.1.2281.10.8.2.1.1.17
genEquip TdmTrail Protected NumOfSwitches	Indicates the number of switches in SNCP between the primary and secondary trails.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.2.1.1.18
genEquip TdmTrail PrimaryPath AlarmStatus	The alarm status of the trail primary path. The value is a Bit Map: Id-Mismatch (0x01) Excessive-Ber	Integer	Read-only	1.3.6.1.4.1.2281.10.8.2.1.1.19

	(0x02) Signal-Degrade-Ber (0x04) Invalid-Trail-Status (0x08) Signal-Failure (0x10) RDI-Detected (0x20)			
genEquip TdmTrail SecondaryPath AlarmStatus	The alarm status of the trail primary path. The value is a bit map: Id-Mismatch (0x01) Excessive-Ber (0x02) Signal-Degrade-Ber (0x04), Invalid-Trail-Status (0x08) Signal-Failure (0x10) RDI-Detected (0x20)	Integer	Read-only	1.3.6.1.4.1.2281.10.8.2.1.1.20
genEquip TdmTrail RowStatus	Description	Integer active [1] notInService [2] notReady [3] createAndGo [4] createAndWait [5] destroy [6]	Read-write	1.3.6.1.4.1.2281.10.8.2.1.1.30

3.7.3 genEquipSynchronization

Parameter	Description	Syntax	Access	OID
genEquip Synchronization Src Table	Synchronization source table.	Sequence of genEquip Synchronization Src Entry	N/A	1.3.6.1.4.1.2281.10.8.3.1
genEquip Synchronization RadioClkSrc	Determines whether the system reference frequency is transported through the radio. [0] indicates that the outgoing signal takes its clock from an independent local clock. Channel number indicates that the	Integer	Read-write	1.3.6.1.4.1.2281.10.8.3.3

	clock is from that radio-channel reference clock.			
genEquip Synchronization SDHClkSrc	Determines whether the system reference frequency is transported through the interface. If the value is 0 it indicates that the outgoing signal takes its clock from an independent local clock. system-clock-source indicates that the clock is from the system reference clock, as taken from the synchronization source interface.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.3.4
genEquip Synchronization PDHClkSrc Table	PDH synchronization source table.	Sequence of genEquip Synchronization PDHClkSrc Entry	N/A	1.3.6.1.4.1.2281.10.8.3.5
genEquip Synchronization PRCRegenerator Mode	Sets the IDU to point-to-point PRC quality frequency distribution mode.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.3.6
genEquip Synchronization PRCRegenerator Direction	Sets the direction in which the frequency signal is transported for electrical GBE interfaces.	Integer line-to-radio [0] radio-to-line [1]	Read-write	1.3.6.1.4.1.2281.10.8.3.7
genEquip Synchronization Src RevertiveTimer	Sets the timeout for a counter which is set once an interface recovers from a failure. After this timeout the interface will be considered stable and can be used as a synchronization source.	Integer (seconds) [0-30] A value of zero means no timer.	Read-write	1.3.6.1.4.1.2281.10.8.3.8

genEquip Synchronization Src ActiveSyncSource Index	Index of the active synchronization source.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.3.9
genEquip Synchronization NodeMode	Set the node synchronization mode.	Integer automatic [0] force [1]	Read-write	1.3.6.1.4.1.2281.10.8.3.10
genEquip Synchronization ForceSource	Force a specific source as the synchronization source.	Integer [0-8] 0 is internal.	Read-write	1.3.6.1.4.1.2281.10.8.3.11
genEquip Synchronization SystemReference Quality	Quality status of system frequency reference signal.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.3.12
genEquip Synchronization RegeneratorSSM Admin	Enable/disable SSM support in PRC regenerator mode.	Syntax	Read-write	1.3.6.1.4.1.2281.10.8.3.13

3.7.3.1 genEquipSynchronizationSrcTable

Table index: genEquipSynchronizationSrcPriority

Parameter	Description	Syntax	Access	OID
genEquip Synchronization Src Entry	Synchronization source table entry.	Sequence of genEquip Synchronization Src Entry	N/A	1.3.6.1.4.1.2281.10.8.3.1.1
genEquip Synchronization Src Priority	Indicates whether the synchronization source is primary or secondary.	Integer [1-8]	Read-only	1.3.6.1.4.1.2281.10.8.3.1.1.1
genEquip Synchronization Src Slot	The slot number of the sync source 1-6.	Integer standalone [0] slot1 [1] slot2 [2] slot3 [3] slot4 [4] slot5 [5] slot6 [6]	Read-write	1.3.6.1.4.1.2281.10.8.3.1.1.2
genEquip Synchronization	The interface type (line (PDH), Radio,	Integer unknown [-1]	Read-write	1.3.6.1.4.1.2281.10.8.3.1.1.3

Src Type	STM-1/OC-3).	line [0] stm-vc [2] stm-signal [4] ether [5]		
genEquip Synchronization Src Num	The sync source number: VC in STM-1/OC-3 Radio channel in case the interface is Radio E1 number in case the interface is PDH (E1s).	Integer	Read-write	1.3.6.1.4.1.2281.10.8.3.1.1.4
genEquip Synchronization Src Valid	Indicates if the source if valid or not. Valid indicates that the clock being extracted from the source is OK and can be used. not-valid indicates that source is not in use, and that each interface will have it's own clock.	Integer not-valid [0] valid [1]	Read-only	1.3.6.1.4.1.2281.10.8.3.1.1.5
genEquip Synchronization Src Trail	Enables / disables the signal of an existing co-located TDM trail used for traffic to be used as a synchronization source. Enabling this parameter in an interface which does not belong to a trail will fail, as well as disabling it for an interface which belongs to a trail.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.3.1.1.6
genEquip Synchronization Src Admin	Enable / disable the synchronization source.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.8.3.1.1.7
genEquip	Assign a quality	Integer	Read-write	1.3.6.1.4.1.2281.10.8.3.1.1.8

Synchronization Src Quality	level to a synchronization source. This enables the system to select the source with the highest quality as the current synchronization source.	automatic [0] g811 [2] ssu-a [4] ssu-b [8] g813-8262 [11] do-not-use [15]		
genEquip Synchronization Src ReceivedSSM	Indicates the value of the received SSM.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.3.1.1.9
genEquip Synchronization Src QualityStatus	Quality status of current synchronization source.	Integer	Read-only	1.3.6.1.4.1.2281.10.8.3.1.1.10

3.7.3.2 genEquipSynchronizationPDHClkSrcTable

Table index: genEquipSynchronizationPDHClkSrcIFNum

Parameter	Description	Syntax	Access	OID
genEquip Synchronization PDHClkSrc Entry	PDH synchronization source table entry.	Sequence of genEquip Synchronization PDHClkSrc Entry	N/A	1.3.6.1.4.1.2281.10.8.3.5.1
genEquip Synchronization PDHClkSrc IFNum	Indicates which interface is configured to take the system reference clock.	Integer	Read-write	1.3.6.1.4.1.2281.10.8.3.5.1.2

genEquip Synchronization PDHClkSrc Source	Determines whether the system reference frequency is transported through the interface defined in genEquip SynchronizationPDHClkSrcIFNum. local-clock indicates that the outgoing signal takes its clock from an independent local clock. system-clock-source indicates that the clock is from the system reference clock, as taken from the synchronization source interface.	Integer local-clock [0] system-clock-source [1]	Read-write	1.3.6.1.4.1.2281.10.8.3.5.1.3

3.8 genEquipInterfaces

Parameter	Description	Syntax	Access	OID
genEquip Interfaces	Commands and parameters for line interface configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.9
genEquip Interfaces Ether	Ethernet interface configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.9.1
genEquip Interfaces E1T1	Commands and parameters for a group of E1 or T1 interfaces.	Subfolder	N/A	1.3.6.1.4.1.2281.10.9.2
genEquip Interfaces Aux	Configures wayside and user channels.	Subfolder	N/A	1.3.6.1.4.1.2281.10.9.3
genEquip Interfaces Sdh	Commands and parameters for STM-1 and OC-3 interface configurations.	Subfolder	N/A	1.3.6.1.4.1.2281.10.9.4

Parameter	Description	Syntax	Access	OID
genEquip Interfaces AIS	Controls AIS detection of all E1, T1 and SDH ports	Subfolder	N/A	1.3.6.1.4.1.2281.10.9.5
genEquip Interfaces ASP	Commands and parameters for Automatic State Propagation (ASP).	Subfolder	N/A	1.3.6.1.4.1.2281.10.9.6

3.8.1 genEquipInterfacesEther

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Ether Table	Ethernet interface configuration and status table.	Sequence of genEquip Interfaces Ether Entry	N/A	1.3.6.1.4.1.2281.10.9.1.1
genEquip Interfaces Ether StatePropagation	Configures the behavior of Ethernet ports in single pipe mode. When a failure is detected, ports will be automatically shut down when the configured conditions take place. The possible choices are a combination of the following failures in the local and the remote IDUs: Radio LOF, Ethernet line LOC, Radio excessive BER.	Integer None [0] LOF, LOC [1] LOF, LOC, Excber [3] LOF, LO, Remote [5] LOF, LOC, Excber, Remote [7] LOF [9] LOF, Excber [11] LOF, Remote [13] LOF, Excber, Remote [15]	Read-write	1.3.6.1.4.1.2281.10.9.1.2

3.8.1.1 genEquipInterfacesEtherTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Ether Entry	Ethernet interface configuration and status table entry.	Sequence of genEquip Interfaces Ether Entry	N/A	1.3.6.1.4.1.2281.10.9.1.1.1
genEquip	Configures the	Integer	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.1

Interfaces Ether ConnType	physical interface type. For port 8 the only valid value is radio. For ports 3 to 7 the only valid value is RJ45. In IP10, port 1 is RJ45 and port 2 is optical SFP. In IP10-G and IP10-E, ports 1 and 2 can be either RJ45 or optical SFP.	Not applicable [-1] RJ45 [0] Electrical SFP [1] Optical SFP [2] Radio [3] N/A [4]		
genEquip Interfaces Ether PortType	Configures the port type. Access - untagged port (in case of managed switch). Trunk - C-VID tagged port (in case of managed switch). CN - Don't care on the vlan tag (in case of metro switch configuration). SN - S-VID is used as the first vlan (in case of metro switch configuration).	Integer Not applicable [-1] Access [0] Trunk [1] Hybrid [2] CN [3] SN [4] Management (30) Wayside (31)	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.2
genEquip Interfaces Ether AutoNegotiation	Enables or disables auto-negotiation of the selected port.	Integer Not applicable [-1] Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.3
genEquip Interfaces Ether Duplex	Configures the duplex mode.	Integer Half [0] Full [1] Auto [2]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.4
genEquip Interfaces Ether Rate	Configures the duplex rate: 10, 100 or 1000 Mbps.	Integer (Mbps) n10 [0] n100 [1] n1000 [2]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.5
genEquip Interfaces Ether	Enables or disables the MAC address learning option on	Integer Not applicable [-1] Enable [2]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.6

PortLerningAdmin	the selected port.	Disable [3]		
genEquip Interfaces Ether FlowCtrl	Indicates the status of flow control on the port.	Integer Not applicable [-1] Off [0] On [1] N/A [2]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.7
genEquip Interfaces Ether LagPortMember	Indicates if the port is a member of the lag.	Integer Not applicable [-1] Not aggregated [0] Group-1 [1] Group-2 [2] Group-3 [3]	Read-only	1.3.6.1.4.1.2281.10.9.1.1.1.8
genEquip Interfaces Ether ActualDuplex	Actual duplex in auto-negotiation.	Integer Half [0] Full [1] Auto [2]	Read-only	1.3.6.1.4.1.2281.10.9.1.1.1.9
genEquip Interfaces Ether ActualRate	Actual rate in auto-negotiation: 10, 100 or 1000 Mbps.	Integer (Mbps) n10 [0] n100 [1] n1000 [2]	Read-only	1.3.6.1.4.1.2281.10.9.1.1.1.10
genEquip Interfaces Ether ClkSrc	The source for the outgoing carrier signal clock. Local-clock is an internal independent oscillator. System-clock-source causes the Ethernet clock to be derived from the defined system clock source (which can be taken from another interface). Changing this parameter per port affect all the Ethernet ports.	Integer Not applicable [-1] Local Clock [0] System Clock Source [1]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.11
genEquip Interfaces Ether PortServiceType	Configures whether the port is being used as a Service Access Point (SAP) or as a Service Network Point	Integer Not applicable [-1] SAP [0] SNP [1]	Read-write	1.3.6.1.4.1.2281.10.9.1.1.1.12

	(SNP) in a network-wide Ethernet service. The parameter has no functionality, but is meant to hold data for the NMS.			

3.8.2 genEquipInterfacesE1T1

Parameter	Description	Syntax	Access	OID
genEquip Interfaces E1T1PortGroup Table	E1 or T1 interfaces configuration and status table.	Sequence of genEquip Interfaces E1T1PortGroup Entry	N/A	1.3.6.1.4.1.2281.10.9.2.1
genEquip Interfaces E1T1 Table	E1 or T1 interface configuration and status table.	Sequence of genEquip Interfaces E1T1Entry	N/A	1.3.6.1.4.1.2281.10.9.2.2

3.8.2.1 genEquipInterfacesE1T1PortGroupTable

Table index: genEquipInterfacesE1T1PortGroupId

Parameter	Description	Syntax	Access	OID
genEquip Interfaces E1T1PortGroup Entry	E1 or T1 interfaces configuration and status table entry.	Sequence of genEquip Interfaces E1T1PortGroup Entry	N/A	1.3.6.1.4.1.2281.10.9.2.1.1
genEquip Interfaces E1T1PortGroup Id	ID of a group E1 or T1 interfaces configuration and status table entry.	Integer	Read-only	1.3.6.1.4.1.2281.10.9.2.1.1.1
genEquip Interfaces E1T1PortGroup LineCode	The PDH line coding. B8ZS is for T1 and HDB3 is for E1. AMI is only for T1.	Integer B8ZS [1] AMI [2] HDB3 [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.2
genEquip Interfaces E1T1PortGroup ExcessiveBER Threshold	Configures the bit error rate alarm threshold for the group of E1s/T1s.	Integer n1e 3 [2] n1e 4 [3] n1e 5 [4]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.3
genEquip Interfaces	Configures the Signal degrade	Integer n1e-6 [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.4

E1T1PortGroup SignalDegrade Threshold	alarm threshold for the group of E1s/T1s.	n1e-7 [4] n1e-8 [5] n1e-9 [6]		
genEquip Interfaces E1T1PortGroup LineCode1to8	The PDH line coding for line interfaces 1 to 8. B8ZS is for T1 and HDB3 is for E1. AMI is only for T1	Integer B8ZS [1] AMI [2] HDB3 [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.5
genEquip Interfaces E1T1PortGroup LineCode9to16	The PDH line coding for line interfaces 9 to 16. B8ZS is for T1 and HDB3 is for E1. AMI is only for T1.	Integer B8ZS [1] AMI [2] HDB3 [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.6
genEquip Interfaces E1T1PortGroup LineCode17to24	The PDH line coding for line interfaces 17 to 24. B8ZS is for T1 and HDB3 is for E1. AMI is only for T1.	Integer B8ZS [1] AMI [2] HDB3 [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.7
genEquip Interfaces E1T1PortGroup LineCode25to32	The PDH line coding for line interfaces 25 to 32. B8ZS is for T1 and HDB3 is for E1. AMI is only for T1.	Integer B8ZS [1] AMI [2] HDB3 [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.1.1.8

3.8.2.2 genEquipInterfacesE1T1Table

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip Interfaces E1T1Entry	E1 or T1 interface configuration and status table entry.	Sequence of genEquip Interfaces E1T1Entry	N/A	1.3.6.1.4.1.2281.10.9.2.2.1
genEquip Interfaces E1T1 Priority	Indicates the ACM priority of the E1/T1. Relevant only for stand-alone configurations. In a shelf, this parameter is defined in the trail configuration.	Integer Low [1] High [2]	Read-only	1.3.6.1.4.1.2281.10.9.2.2.1.1

genEquip Interfaces E1T1 CurrBER	Indicates the bit error rate alarm threshold for the E1/T1.	Integer n1e 3 [2] n1e 4 [3] n1e 5 [4]	Read-only	1.3.6.1.4.1.2281.10.9.2.2.1.2
genEquip Interfaces E1T1 Loopback	Configures the loopback test on the E1/T1.	Integer Off [1] Towards line [2] Towards radio [3]	Read-write	1.3.6.1.4.1.2281.10.9.2.2.1.3
genEquip Interfaces E1T1 AISStatus	Indicates the status of the AIS detection. Supported only if AIS detection is activated.	Integer Detected [0] Not detected [1]	Read-only	1.3.6.1.4.1.2281.10.9.2.2.1.4
genEquip Interfaces E1T1 CableLength	Determines the cable length range. Valid only for T1 interfaces.	Integer Len 0-133ft; 0-41m [1] Len 133ft-266ft; 41-81m [2] Len 266ft-399ft; 81-122m [3] Len 399ft-533ft; 122-162m [4] Len 533ft-655ft; 162-200m [5]	Read-write	1.3.6.1.4.1.2281.10.9.2.2.1.5

3.8.3 genEquipInterfacesAux

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Aux WaySide Table	Wayside interface configuration table.	Sequence of genEquip Interfaces Aux WaySide Entry	N/A	1.3.6.1.4.1.2281.10.9.3.1.1
genEquip Interfaces Aux UserChan Table	User channel configuration table.	Sequence of genEquip Interfaces AuxUserChanEntry	N/A	1.3.6.1.4.1.2281.10.9.3.2

3.8.3.1 genEquipInterfacesAuxWaySideTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Aux WaySide Entry	Wayside interface configuration table entry.	Sequence of genEquip Interfaces Aux WaySide Entry	N/A	1.3.6.1.4.1.2281.10.9.3.1.1.1
genEquip Interfaces Aux WaySide Admin	Enable Ethernet port #4 to be a wayside port. Disabling this option will cause the port to behave as a normal traffic Ethernet port.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.3.1.1.1.1
genEquip Interfaces Aux WaySide Capacity	Configures the wayside Ethernet port capacity.	Integer Narrow band (64Kbps) [0] Wide band (2Mbps) [1]	Read-write	1.3.6.1.4.1.2281.10.9.3.1.1.1.2
genEquip Interfaces Aux WaySide AutoNegotiation	Activate wayside port auto negotiation.	Integer Off [0] On [1]	Read-write	1.3.6.1.4.1.2281.10.9.3.1.1.1.3
genEquip Interfaces Aux WaySide Duplex	Configures the wayside port duplex.	Integer Not applicable [-1] Half [0] Full [1]	Read-write	1.3.6.1.4.1.2281.10.9.3.1.1.1.4
genEquip Interfaces Aux WaySide Rate	Configures the wayside interface port rate.	Integer (Mbps) Not applicable [-1] n10 [0] n100 [1]	Read-write	1.3.6.1.4.1.2281.10.9.3.1.1.1.5

3.8.3.2 genEquipInterfacesAuxUserChanTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Aux	User channel configuration table entry.	Sequence of genEquip Interfaces	N/A	1.3.6.1.4.1.2281.10.9.3.2.1

UserChan Entry		AuxUserChanEntry		
genEquip Interfaces Aux ChanType	User channel type. The asynchronous modes allow two channels, one in each port. The twin asynchronous mode uses port 1 for v.11 and port 2 for RS-232. The synchronous modes use two ports each.	Integer Asynchronous RS232 [1] Asynchronous V-11 [2] Twin asynchronous RS232 and V-11 [3] Synchronous V-11 codirectional [4] Synchronous V-11 contradirectional [5]	Read-write	1.3.6.1.4.1.2281.10.9.3.2.1.1

3.8.4 genEquipInterfacesSdh

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Sdh Table	STM-1 and OC-3 interfaces configuration and status table.	Sequence of genEquip Interfaces Sdh Entry	N/A	1.3.6.1.4.1.2281.10.9.4.1
genEquip Interfaces Sdh LpVc Table	Properties for each low-order path VC (VC-11/12) in the SDH interface.	Sequence of genEquip Interfaces Sdh LpVc Entry	N/A	1.3.6.1.4.1.2281.10.9.4.2

3.8.4.1 genEquipInterfacesSdhTable

Table index: ifIndex

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Sdh Entry	STM-1 and OC-3 interfaces configuration and status table entry.	Sequence of genEquip Interfaces Sdh Entry	N/A	1.3.6.1.4.1.2281.10.9.4.1.1
genEquip Interfaces Sdh MuteTx	Enables or disables the mute Tx option on the interface.	Integer Disable [0] Enable [1]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.1
genEquip Interfaces Sdh ClockSource	The clock source used as a reference for the outgoing STM-1 signal.	Integer Internal clock [0] Loop [1]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.2

		Synchronization-VC [2]		
genEquip Interfaces Sdh AISAdmin	Enable or disable AIS signaling at the V5 byte on the STM-1, OC-3 interface.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.3
genEquip Interfaces Sdh TraceIdReceived	Indicates the J0 trace identifier signal that was received on the interface.	Display string	Read-only	1.3.6.1.4.1.2281.10.9.4.1.1.4
genEquip Interfaces Sdh TraceId Transmitted	Configures the string used as the transmitted STM-1/OC-3 signal J0 trace identifier.	Display string	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.5
genEquip Interfaces Sdh TraceId Expected	Configures the J0 trace identifier signal that is expected to be received on the interface.	Display string	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.6
genEquip Interfaces Sdh TraceId StringLength	Trace identifier string length. Lengths 0 and 15 are valid for SDH systems. Length 62 is additionally available in SONET systems.	Integer Length 1 [0] Length 15 [1] Length 62 [2]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.7
genEquip Interfaces Sdh ExcessiveBER	Configures the excessive bit error rate alarm threshold on the interface.	Integer n1e-3 [0] n1e-3 [1] n1e-5 [2]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.8
genEquip Interfaces Sdh SignalDegrade	Configures the signal degrade threshold alarm on the interface.	Integer n1e-6 [3] n1e-7 [4] n1e-8 [5] n1e-9 [6]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.9
genEquip Interfaces Sdh Loopback	SDH loopback.	Integer Off [0] Loopback towards system [1]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.10

		Loopback towards line [2]		
genEquip Interfaces Sdh ClockSourceStatus	The actual source of the clock for the outgoing STM-1 signal. It may differ from the desired source if the source signal is missing or corrupt.	Integer Internal clock [0] Loop [1] Synchronization-VC [2]	Read-only	1.3.6.1.4.1.2281.10.9.4.1.1.11
genEquip Interfaces Sdh LineTx ProtectionMode	Configures the behavior of the transmitting line in a 1+1 HSB configuration. In normal mode the stand-by signal is silenced. In uni-directional MSP mode, both units are transmitting.	Integer Normal [1] Uni-directional MSP [2]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.12
genEquip Interfaces Sdh SyncVC	The outgoing VC signal to be taken as the STM-1/OC-3 synchronization source if genEquip Interfaces Sdh ClockSource is set to synchronization-vc	Integer [1-63]	Read-write	1.3.6.1.4.1.2281.10.9.4.1.1.13

3.8.4.2 genEquipInterfacesSdhLpVcTable

Table index: genEquipInterfacesSdhLpVcId, ifIndex

Parameter	Description	Syntax	Access	OID
genEquip Interfaces Sdh LpVc Entry	Table entry for storing properties for each low-order path VC (VC-11/12) in the SDH interface.	Sequence of genEquip Interfaces Sdh LpVc Entry	N/A	1.3.6.1.4.1.2281.10.9.4.2.1
genEquip Interfaces Sdh LpVc	VC-11 or VC-12 number. VCs are numbered according to standard KLM	Integer [1-84]	Read-only	1.3.6.1.4.1.2281.10.9.4.2.1.1

Id	order.			
genEquip Interfaces Sdh LpVc AIS	Indicates whether incoming AIS is currently detected in the VC's payload.	Integer aisDetected [0] aisNotDetected [1]	Read-only	1.3.6.1.4.1.2281.10.9.4.2.1.2

3.8.5 genEquipInterfacesAIS

Parameter	Description	Syntax	Access	OID
genEquip Interfaces AIS Admin	Enables or disables AIS detection of all E1, T1 and SDH ports.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.5.1

3.8.6 genEquipInterfacesASP

Parameter	Description	Syntax	Access	OID
genEquip Interfaces ASP Admin	Enable or disable Automatic State Propagation (ASP).	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.6.1
genEquip Interfaces ASP LocalLOC	Enables fault propagation upon detection of local LOC. Relevant only for non-protected single-pipe switch mode only.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.6.2
genEquip Interfaces ASP LocalExcessiveBER	Enables fault propagation to the Ethernet interface upon detection of radio excessive Bit Error Rate (BER). Relevant only for non-protected single-pipe switch mode only.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.6.3
genEquip Interfaces ASP ACMthreshold	Select which profile enables propagation if the radio ACM profile degrades below a defined profile. Relevant only for non-protected	Integer Profile-0 [0] Profile-1 [1] Profile-2 [2] Profile-3 [3] Profile-4 [4] Profile-5 [5]	Read-write	1.3.6.1.4.1.2281.10.9.6.4

	single-pipe switch mode, and only when ACM radio script is running.	Profile-6 [6] Profile-7 [7]		
genEquip Interfaces ASP RemoteFault	Enables / disables automatic state propagation. The following remote faults are propagated to the NE by default: Radio LOF Radio Link ID mismatch Ethernet line LOC Any other remote faults are propagated to the NE only if they are enabled at the local NE.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.9.6.5

3.9 genEquip DiagnosticsAndMaintainance

Parameter	Description	Syntax	Access	OID
genEquip DiagAndMaintenance	Loopback configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.10
genEquip DiagAndMaintenance RadioLoopback Timeout	Radio loopback timeout, in minutes. 0 means no timer.	Integer [0-1440]	Read-write	1.3.6.1.4.1.2281.10.10.1
genEquip DiagAndMaintenance LineLoopback Timeout	Line loopback timeout, in minutes. 0 means no timer.	Integer [0-1440]	Read-write	1.3.6.1.4.1.2281.10.10.2
genEquip DiagAndMaintenance SDHLoopback Timeout	STM-1/OC-3 line loopback timeout, in minutes. 0 means no timer.	Integer [0-1440]	Read-write	1.3.6.1.4.1.2281.10.10.3

3.10 genEquipSecurity

Parameter	Description	Syntax	Access	OID
genEquip Security	Security configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.11

Parameter	Description	Syntax	Access	OID
genEquip Security Configuration	System security configuration	Subfolder	N/A	1.3.6.1.4.1.2281.10.11.1
genEquip Security UsersAndGroups	User and group configuration.	Subfolder	N/A	1.3.6.1.4.1.2281.10.11.2
genEquip SecuritySNMP	Commands and parameters for the SNMP community strings.	Subfolder	N/A	1.3.6.1.4.1.2281.10.11.3

3.10.1 genEquipSecurityConfiguration

Parameter	Descripton	Syntax	Access	Access
genEquip SecurityCfg UploadPublicKey Status	Indicates the upload status of the public key.	Integer Ready [0] In progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.11.1.1
genEquip SecurityCfg DownloadSecurity Status	Indicates the download status of the digital certificate.	Integer Ready [0] In progress [1] Success [2] Failure [3]	Read-only	1.3.6.1.4.1.2281.10.11.1.2
genEquip SecurityCfg SecurityFile Name	Configures the file name to be downloaded.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.1.3
genEquip SecurityCfg SecurityFile Type	Configures the digital certificate file type.	Integer Target Certificate [0] Target CA Certificate [1]	Read-write	1.3.6.1.4.1.2281.10.11.1.4
genEquip SecurityCfg SecurityFile Format	Configures the security file format.	Integer Privacy enhanced mail .pem [0] Base 64 encoded .der [1]	Read-write	1.3.6.1.4.1.2281.10.11.1.5

Parameter	Descripton	Syntax	Access	Access
genEquip SecurityCfg Security WebCertificate Admin	Enables or disables the admin state of the security certificate.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.11.1.6
genEquip SecurityCfg WebProtocol	Configures the web protocol.	Integer Unsecure http [1] Secure https [2]	Read-write	1.3.6.1.4.1.2281.10.11.1.7
genEquip SecurityCfg TelnetAdmin	Enables or disables the telnet server on the network element.	Integer Enable [2] Disable [3]	Read-write	1.3.6.1.4.1.2281.10.11.1.8
genEquip SecurityCfg AutoLogOutPeriod	Configures the number of seconds for automatic logout period for Command Line Interface or web users.	Integer (seconds) [1-60]	Read-write	1.3.6.1.4.1.2281.10.11.1.9
genEquip Security XFTP	Configures the settings for the FTP/SFTP server.	Subfolder	N/A	1.3.6.1.4.1.2281.10.11.1.10
genEquip SecurityCfg Pass FirstLoginChange	Define whether a user will be required to change the password when logging in for the first time.	Integer no [0] yes [1]	Read-write	1.3.6.1.4.1.2281.10.11.1.11
genEquip SecurityCfg CSRCreation	Create a CSR file. The file may be uploaded to an external server using the genEquip MngFileTransfer FileTypeOper OID.	Display string [0-512] Command syntax: <country_name> <state> <locality_name> <organization_name> <organization_unit_name> <common_name> <email_addr> Enter a "." for any fields that you wish to leave blank.	Read-write	1.3.6.1.4.1.2281.10.11.1.12

Parameter	Descripton	Syntax	Access	Access
genEquip SecurityCfg WarningBanner FName	The warning banner file name to be downloaded to the NE.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.1.13

3.10.1.1 genEquipSecurityXFTP

Parameter	Description	Syntax	Access	OID
genEquip Security XFTP HostIP	Configures the IP address for the FTP/SFTP host.	IP address	Read-write	1.3.6.1.4.1.2281.10.11.10.1
genEquip Security XFTP HostPath	Configures the directory path for the FTP/SFTP host.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.10.2
genEquip Security XFTP Protocol	Configures whether FTP or SFTP protocol is used.	Integer FTP [0] SFTP [1]	Read-write	1.3.6.1.4.1.2281.10.11.10.3
genEquip Security XFTP UserName	Configures the username for the FTP/SFTP host.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.10.4
genEquip Security XFTP Password	Configures the password for the FTP/SFTP host.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.10.5

3.10.2 genEquipSecurityUsersAndGroups

Parameter	Description	Syntax	Access	OID
genEquip Security Users Table	Users data table.	Sequence of genEquip Security Users Entry	N/A	1.3.6.1.4.1.2281.10.11.2.1

Parameter	Description	Syntax	Access	OID
genEquip Security UsersAndGroups ChangePasswd	Changes the user password at the command line. It takes all arguments as the command. It cannot be done through the table since it needs to provide the old password as well.	Display string The format is: <username> <old-password> <new-password>' separated with spaces.	Read-write	1.3.6.1.4.1.2281.10.11.2.2

3.10.2.1 genEquipSecurityUsersTable

Table index: genEquipSecurityUsersName

Parameter	Description	Syntax	Access	OID
genEquip Security Users Entry	Users data table entry.	Sequence of genEquip Security Users Entry	N/A	1.3.6.1.4.1.2281.10.11.2.1.1
genEquip Security Users Name	Configure the user name.	Display string	N/A	1.3.6.1.4.1.2281.10.11.2.1.1.1
genEquip Security Users Passwd	Creates the initial password for the user. To change a password, use the genEquip Security Users AndGroupsChange Passwd command.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.2.1.1.2

Parameter	Description	Syntax	Access	OID
genEquip Security Users Priviledge	Configures the privileges for the user: No privileges: Cannot log in to system. Viewer: Can only view information. Operator: Can configure all parameters except for security. Admin: Can also add users to the system. Tech: Can also access the Linux OS shell.	Integer no-privilege-lvl [-1] viewer-user-lvl [0] operator-user-lvl [1] admin-user-lvl [2] tech-user-lvl [3]	Read-write	1.3.6.1.4.1.2281.10.11.2.1.1.3
genEquip Security Users PasswdAging	Configures the user's password aging time. 99999 sets the password aging time to No Aging.	Integer (days) [0-90]	Read-write	1.3.6.1.4.1.2281.10.11.2.1.1.4
genEquip Security Users ExprDate	Configures an expiration date for the user's password.	Integer (time_t format)	Read-write	1.3.6.1.4.1.2281.10.11.2.1.1.5
genEquip Security Users LastLogin	Indicates the last login date of the user.	Integer (seconds) Time in seconds since January 1, 1970 00:00 UTC.	Read-only	1.3.6.1.4.1.2281.10.11.2.1.1.6
genEquip Security Users RowStatus	Row status of the user entry.	Integer Active [1] Not in Service [2] Not Ready [3] Create and Go [4] Create and Wait [5] Destroy [6]	Read-write	1.3.6.1.4.1.2281.10.11.2.1.1.30

3.10.3 genEquipSecuritySNMP

Parameter	Description	Syntax	Access	OID
genEquip Security SNMP	Configures the SNMP read community string.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.3.1

ReadCommunity				
genEquip Security SNMP WriteCommunity	Configures the SNMP write community string.	Display string	Read-write	1.3.6.1.4.1.2281.10.11.3.2

4. Standard MIB support

This chapter details the public MIB standards supported by the IP10-G MIB.

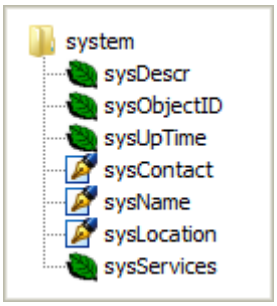
4.1 RFC-1213 (MIB II)

This section details the implementation of each area of the RFC-1213 standard within the context of the IP10-G MIB.

4.1.1 System parameters

The table below details the legal values for each system parameter within RFC-1213 from implementation within the IP10-G MIB.

RFC-1213 system parameters



System parameters

Parameter	Access	Description
sysDescr	Read only	A description of the network element. The NE always return “IP10 agent”
sysObjID	Read only	A unique identifier for the product type. • IP10: 1.3.6.1.4.1.2281.1.7.1 • IP10-G(SA): 1.3.6.1.4.1.2281.1.7.2 • IP10-G: 1.3.6.1.4.1.2281.1.7.3 • IP10-E(SA): 1.3.6.1.4.1.2281.1.7.7 • IP10-E: 1.3.6.1.4.1.2281.1.7.8
sysUpTime	Read only	The time (in hundredths of a second) since the network management portion of the system was last re-initialized
sysContact	Read write	The name of the contact person for this network element
sysName	Read write	An administratively assigned name for the network element. By convention, this is the node's fully qualified domain name
sysLocation	Read write	The physical location of the network element of this node
sysServices	Read only	A value which indicates the set of services that this entity primarily offers. The device always returns 3

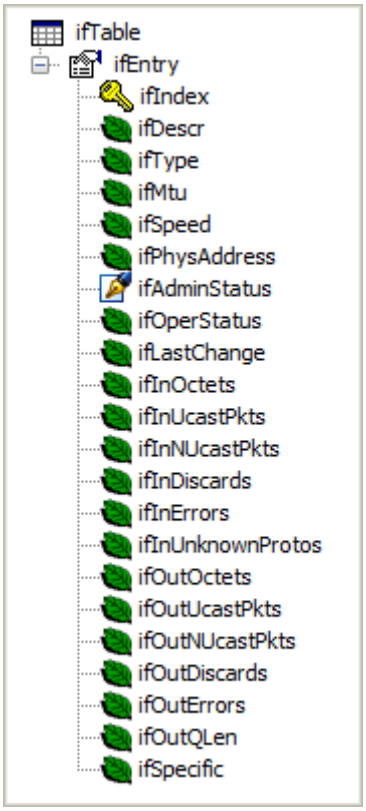
4.1.2 Interfaces

ifNumber - The number of network interfaces (regardless of their current state) present on this system.

4.1.3 ifTable

The ifTable provides a list of all available interfaces to the application developer.

RFC-1213 ifTable



4.1.3.1 ifTable column supported

This section details ifTable support within the IP10-G MIB.

Supported IfTables

Table Name	OID	Description
Ifindex	1.3.6.1.2.1.2.2.1.1	Supported
Ifdescr	1.3.6.1.2.1.2.2.1.2	Supported
Iftype	1.3.6.1.2.1.2.2.1.3	Supported
Ifspeed	1.3.6.1.2.1.2.2.1.5	Supported. The radio interface should return the “radio capacity” according to the selected MRMC script.
Ifadminstatus	1.3.6.1.2.1.2.2.1.7	Supported
Ifoperstatus	1.3.6.1.2.1.2.2.1.8	Supported
Iflastchange	1.3.6.1.2.1.2.2.1.9	Not supported. Returns **0**
Ifinoctets	1.3.6.1.2.1.2.2.1.10	The 32 lower bits of the corresponding **InGoodOctets** counter of the RMON are reflected here.
Ifinucast	1.3.6.1.2.1.2.2.1.11	The 32 bit corresponding **InUnicast** counter of the RMON are reflected here.
Ifinnucastpkts	1.3.6.1.2.1.2.2.1.12	A 32 bit sum of the **InMulticast** + **InBroadcast** counters of the RMON are reflected here. In any case the result does not exceed 32 bit.
Ifindiscards	1.3.6.1.2.1.2.2.1.13	The 32 bit corresponding **InDiscard** counter of the RMON is reflected here.
Ifinerrors	1.3.6.1.2.1.2.2.1.14	A 32 bit sum of the following RMON counters: **InUndersize** + **InFragments** + **InOversize** + **InJabber** + **InRxErr** + **InFCS err**. In any case the result does not exceed 32 bit.
Ifunknownprotos	1.3.6.1.2.1.2.2.1.15	Not supported by the switch. Returns **0**.
Ifoutoctets	1.3.6.1.2.1.2.2.1.16	The 32 lower bits of the corresponding **OutGoodOctets** counter of the RMON is reflected here.
Ifoutucastpkts	1.3.6.1.2.1.2.2.1.17	The 32 bit corresponding **OutUnicast** counter of the RMON is reflected here.
Ifoutnucastpkts	1.3.6.1.2.1.2.2.1.18	A 32 bit sum of the **OutMulticast** + **OutBroadcast** counters of the RMON are reflected here. In any case the result does not exceed 32 bit.
Ifoutdiscards	1.3.6.1.2.1.2.2.1.19	Not supported by the switch. Returns **0**.
Ifouterrors	1.3.6.1.2.1.2.2.1.20	The 32 bit corresponding **OutFCSerr** counter of the RMON is reflected here.

4.1.3.2 ifIndex

The following table lists how the ifIndex range is divided.

ifIndex interfaces

ifIndex	Interface
1	Radio interface
21	User channel
31	EoW (engineer order wire)
201-399	E1 interfaces (if exist)
401-499	DS1 interfaces (if exist)
5000-5011	Ethernet interfaces
5101-5103	LAG interfaces

4.1.4 Other parameters and tables

The following parameters and tables are answered by the CPU interface of the network element.

Other supported networking parameters

Parameters	Supported by IP10-G MIB
AT (atTable)	Supported
IP	Supported (also defined in RFC 2011)
ICMP	Supported
TCP	Supported (also defined in RFC 2012)
UDP	Supported (also defined in RFC 2013)

4.2 RFC-2863 (IF-MIB)

In addition, the IP10-G MIB supports the ifXTable in the IF-MIB (OID - 1.3.6.1.2.1.31):

ifXTable entries

MIB name	OID	Description
Ifname	1.3.6.1.2.1.31.1.1.1.1	A description of the traffic interface. The possible values are: • Radio interface: **Radio** • Ethernet interfaces: **Ethernet#1**..**Ethernet#8** • E1 interfaces: **E1#1**..**E1#n** • T1 interfaces: **T1#1**..**T1#n** • STM-1interfaces: **STM-1#1**..**STM-1#n** • OC-3 interfaces: **OC-3#1**..**OC-3#n**
ifInMulticastPkts	1.3.6.1.2.1.31.1.1.1.2	The 32 bit corresponding **InMulticast** counter of the RMON is reflected here.
ifInBroadcastPkts	1.3.6.1.2.1.31.1.1.1.3	The 32 bit corresponding **InBroadcast** counter of the RMON is reflected here.
ifOutMulticastPkts	1.3.6.1.2.1.31.1.1.1.4	The 32 bit corresponding **OutMulticast** counter of the RMON is reflected here.
ifOutBroadcastPkts	1.3.6.1.2.1.31.1.1.1.5	The 32 bit corresponding **OutBroadcast** counter of the RMON is reflected here.
ifHCInOctets	1.3.6.1.2.1.31.1.1.1.6	The 64 bit corresponding **InGoodOctets** counter of the RMON is reflected here.
ifHCInUcastPkts	1.3.6.1.2.1.31.1.1.1.7	Not supported. Returns **0**
ifHCInMulticastPkts	1.3.6.1.2.1.31.1.1.1.8	Not supported. Returns **0**
ifHCInBroadcastPkts	1.3.6.1.2.1.31.1.1.1.9	Not supported. Returns **0**
ifHCOutOctets	1.3.6.1.2.1.31.1.1.1.10	The 64 bit corresponding **OutGoodOctets** counter of the RMON will be reflected here.
ifHCOutUcastPkts	1.3.6.1.2.1.31.1.1.1.11	Not supported. Returns **0**
ifHCOutMulticastPkts	1.3.6.1.2.1.31.1.1.1.12	Not supported. Returns **0**
ifHCOutBroadcastPkts	1.3.6.1.2.1.31.1.1.1.13	Not supported. Returns **0**
Ifalias	1.3.6.1.2.1.31.1.1.1.18	A free text that can be used by the network manager to describe the interface. This description can contain up to 64 characters.

All the rest of the entries of this MIB are not supported and return **0**.

4.3 MIB II - SNMP (RFC-3418)

The SNMP counters defined in this standard are supported by the CPU interface of the network element.

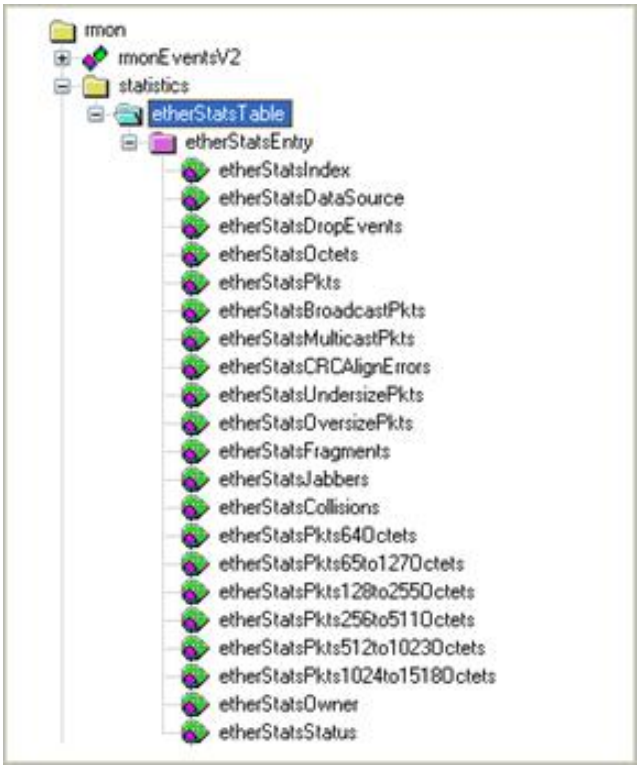
4.4 RMON - MIB (RFC-2819)

The RMON-MIB is supported as defined in RFC-2819.

The support is limited to RMON statistics that are defined in the etherStatsTable.

LAG Interface does NOT appear in RMON statistics table (etherStatsTable).

RMON MIB - statistics



4.5 SNMP V3 support

This section describes SNMP V3 support for the IP10-G MIB.

- Management framework (RFC-2271)
  - This MIB is supported as a part of the support in SNMP V3.
- Architecture for describing SNMP management framework (RFC-3411)
  - This MIB is supported as a part of the support in SNMP V3.
- Message processing and dispatching for the SNMP (RFC-3412)
  - This MIB is supported as a part of the support in SNMP V3.
- SNMP applications (RFC-3413)
  - This MIB is supported as a part of the support in SNMP V3.
- User-based security model (USM) – (RFC-3414)
  - This MIB is supported as a part of the support in SNMP V3. SNMP V3 User Settings can be set from here.
- View-based access control model (VACM) – (RFC 3415)
  - This MIB is supported as a part of the support in SNMP V3. vacmContextName should be used to access the other shelf units.

4.6 SNMPv3 traps (genTraps)

The genTraps section of the MIB files contains commands and parameters to configure SNMPv3 traps and events.

4.6.1 General trap (generalV3Trap)

The generalV3trap is a general network trap that is used with the following MIB objects.

The Object ID for this trap is: 1.3.6.1.4.1.2281.11.1.

generalV3Trap MIB objects

Parameter	Description
genEquipCurrentAlarmCounter	Contains the information of a RAISED trap.
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised.
genEquipCurrentAlarmId	Alarm ID.
genEquipCurrentAlarmSlotId	ID of the slot that is originating the alarm.
genEquipCurrentAlarmInstance	Alarm Instance.
genEquipCurrentAlarmSeverity	Severity of the current alarm.
genEquipCurrentAlarmIfIndex	Interface index that indicates where the alarm occurred. An alarm that is not associated with a specific interface has the value: 65001.
genEquipCurrentAlarmModule	Module of the alarm.
genEquipCurrentAlarmDesc	Description of the alarm.
genEquipMostSevereAlarm	Indicates the most severe alarm in the system.

Parameter	Description
genEquipNetworkAgentIp	Agent IP address.
genEquipCurrentAlarmState	Indicates whether the alarm is RAISED or CLEARED.
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).

4.6.2 Event trap (eventV3Trap)

The eventV3trap is an event network trap that is used with the following MIB objects.

The Object ID for this trap is: 1.3.6.1.4.1.2281.11.2.

eventV3lTrap (SNMP v3)

Parameter	Description
genEquipCurrentAlarmCounter	Contains the information of a RAISED trap.
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised.
genEquipCurrentAlarmId	Alarm ID.
genEquipCurrentAlarmSlotId	ID of the slot that is originating the alarm.
genEquipCurrentAlarmInstance	Alarm Instance.
genEquipCurrentAlarmSeverity	Severity of the current alarm.
genEquipCurrentAlarmIfIndex	Interface index that indicates where the alarm occurred. An alarm that is not associated with a specific interface has the value: 65001.
genEquipCurrentAlarmModule	Module of the alarm.
genEquipCurrentAlarmDesc	Description of the alarm.
genEquipMostSevereAlarm	Indicates the most severe alarm in the system.
genEquipNetworkAgentIp	Agent IP address.
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).

4.6.3 Heartbeat trap (heartbeatV3Trap)

The heartbeatV3trap is a trap that is sent once per heartbeat period and is used with the following MIB object. Detailed descriptions of the parameters for the object can be found in Section **Error! Reference source not found.**.

- genEquipTrapCfgMgrCLLI

The Object ID for this trap is: 1.3.6.1.4.1.2281.11.3.

4.6.4 STP trap (eventv3TrapSTP)

The eventv3TrapSTP adds the STP parameters to the general trap. The description field shows the descriptions of the event:

- STP event - on port:<port>
- root id:<root id>
- Bridge role:<bridge role>
- Role:<Role>
- State:<state>

eventv3TrapSTP parameters

Parameter	Description
genEquipCurrentAlarmCounter	Contains the information of a RAISED trap.
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised.
genEquipCurrentAlarmId	Alarm ID.
genEquipCurrentAlarmSlotId	ID of the slot that is originating the alarm.
genEquipCurrentAlarmInstance	Alarm Instance.
genEquipCurrentAlarmSeverity	Severity of the current alarm.
genEquipCurrentAlarmIfIndex	Interface index that indicates where the alarm occurred. An alarm that is not associated with a specific interface has the value: 65001.
genEquipCurrentAlarmModule	Module of the alarm.
genEquipCurrentAlarmDesc	Description of the alarm.
genEquipMostSevereAlarm	Indicates the most severe alarm in the system.
genEquipNetworkAgentIp	Agent IP address.
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).
genEquipEthernetSwitchXSTPParamsEthernetPortsRole	RSTP port role.
genEquipEthernetSwitchXSTPParamsEthernetPortsState	RSTP port state.
genEquipEthernetSwitchXSTPBridgeRole	Bridge role.
genEquipEthernetSwitchXSTPRootID	RSTP root ID.

4.7 SNMPv1 traps (SNMPv1TRAPs)

The SNMPv1TRAP section of the MIB files contains commands and parameters to configure SNMPv1 traps and events.

4.7.1 Alarm trap (alarmTrap)

The alarmTrap is an alarm network trap that is used with the following objects.

eventTrap (SNMP v1)

Parameter	Description
genEquipCurrentAlarmCounter	Contains the information of a RAISED trap.
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised.
genEquipCurrentAlarmId	Alarm ID.
genEquipCurrentAlarmSlotId	ID of the slot that is originating the alarm.
genEquipCurrentAlarmInstance	Alarm Instance.
genEquipCurrentAlarmSeverity	Severity of the current alarm.
genEquipCurrentAlarmIfIndex	Interface index that indicates where the alarm occurred. An alarm that is not associated with a specific interface has the value: 65001.
genEquipCurrentAlarmModule	Module of the alarm.
genEquipCurrentAlarmDesc	Description of the alarm.
genEquipMostSevereAlarm	Indicates the most severe alarm in the system.
genEquipNetworkAgentIp	Agent IP address.
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).

4.7.2 Event trap (eventTrap)

The eventTrap is an event network trap that is used with the following objects.

eventTrap (SNMP v1)

Parameter	Description
genEquipCurrentAlarmCounter	Contains the information of a RAISED trap.
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised.
genEquipCurrentAlarmId	Alarm ID.
genEquipCurrentAlarmSlotId	ID of the slot that is originating the alarm.
genEquipCurrentAlarmInstance	Alarm Instance.
genEquipCurrentAlarmSeverity	Severity of the current alarm.

Parameter	Description
genEquipCurrentAlarmIfIndex	Interface index that indicates where the alarm occurred. An alarm that is not associated with a specific interface has the value: 65001.
genEquipCurrentAlarmModule	Module of the alarm.
genEquipCurrentAlarmDesc	Description of the alarm.
genEquipMostSevereAlarm	Indicates the most severe alarm in the system.
genEquipNetworkAgentIp	Agent IP address.
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).

4.7.3 Heartbeat trap (heartbeatTrap)

The heartbeatTrap is an SNMP v1 trap that is sent once per heartbeat period and is used with the following MIB object.

- genEquipTrapCfgMgrCLLI

4.7.4 STP trap (eventTrapSTP)

The eventTrapSTP adds the STP parameters to the general trap. The description field shows the descriptions of the event:

- STP event - on port:<port>
- root id:<root id>
- Bridge role:<bridge role>
- Role:<Role>
- State:<state>

eventTrapSTP (SNMP v1)

Parameter	Description
genEquipCurrentAlarmCounter	Contains the information of a RAISED trap.
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised
genEquipCurrentAlarmId	Alarm ID.
genEquipCurrentAlarmSlotId	ID of the slot that is originating the alarm.
genEquipCurrentAlarmInstance	Alarm Instance.
genEquipCurrentAlarmSeverity	Severity of the current alarm.
genEquipCurrentAlarmIfIndex	Interface index that indicates where the alarm occurred. An alarm that is not associated with a specific interface has the value: 65001.
genEquipCurrentAlarmModule	Module of the alarm.
genEquipCurrentAlarmDesc	Description of the alarm.
genEquipMostSevereAlarm	Indicates the most severe alarm in the system.

Parameter	Description
genEquipNetworkAgentIp	Agent IP address.
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).
genEquipEthernetSwitchXSTPParamsEthernetPortsRole	RSTP port role.
genEquipEthernetSwitchXSTPParamsEthernetPortsState	RSTP port state.
genEquipEthernetSwitchXSTPBridgeRole	Bridge role.
genEquipEthernetSwitchXSTPRootID	RSTP root ID.

4.8 LLDP

4.8.1 lldpObjects

Parameter	Description	Syntax	Access	OID
lldp Configuration	LLDP configuration	Subfolder	N/A	1.0.8802.1.1.2.1.1
lldp Statistics	LLDP statistics	Subfolder	N/A	1.0.8802.1.1.2.1.2
lldp LocalSystemData	LLDP local system data	Subfolder	N/A	1.0.8802.1.1.2.1.3
lldp Remote SystemsData	Remote system data	Subfolder	N/A	1.0.8802.1.1.2.1.4

4.8.1.1 lldpConfiguration

Parameter	Description	Syntax	Access	OID
lldp Message TxInterval	The interval at which LLDP frames are transmitted on behalf of this LLDP agent.	Integer (seconds) [10-600]	Read-write	1.0.8802.1.1.2.1.1.1
lldp TxDelay	Indicates the delay between successive LLDP frame transmissions initiated by value/status changes in the LLDP local systems MIB.	Integer (seconds) [1-150]	Read-write	1.0.8802.1.1.2.1.1.4
lldp		Sequence of lldp	N/A	1.0.8802.1.1.2.1.1.6

PortConfig Table		PortConfigEntry		

lldpPortConfigTable

Table index: lldpPortConfigPortNum

Parameter	Description	Syntax	Access	OID
Lldp PortConfig AdminStatus	Configures the status of the local LLDP agent. txOnly [1] LLDP agent will transmit LLDP frames on this port and it will not store any information about the remote systems connected. rxOnly [2] LLDP agent will receive, but it will not transmit LLDP frames on this port. txAndRx [3] LLDP agent will transmit and receive LLDP frames on this port. disabled [4] LLDP agent will not transmit or receive LLDP frames on this port.	Integer txOnly [1] rxOnly [2] txAndRx [3] disabled [4]	Read-write	1.0.8802.1.1.2.1.1.6.1.2

4.8.1.2 lldpStatatistics

Parameter	Description	Syntax	Access	OID
Lldp StatsTx PortTable	Tx stats table	Sequence of lldp StatsTx PortEntry	N/A	1.0.8802.1.1.2.1.2.6
Lldp StatsRx PortTable	Rx stats table	Sequence of lldp StatsRx PortEntry	N/A	1.0.8802.1.1.2.1.2.7

lldpSStatsTxTable

Table index: lldpStatsTxPortNum

Parameter	Description	Syntax	Access	OID
Lldp StatsTx PortTable Entry	Tx stats table entry	Sequence of lldp StatsTx PortEntry	N/A	1.0.8802.1.1.2.1.2.6.1
Lldp StatsTx PortNum	This is actual port number (in IP-10, 1-8) The index value used to identify the port component associated with this entry. The value of this object is used as a port index to the lldpStatsTable.	Integer [1- 4096]	Read-only	1.0.8802.1.1.2.1.2.6.1.1
Lldp StatsTx PortFrames Total	The number of LLDP frames transmitted by this LLDP agent on the indicated port.	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.6.1.2

lldpSStatsRxTable

Table index: lldpStatsRxPortNum

Parameter	Description	Syntax	Access	OID
Lldp StatsRx PortTable Entry	Rx stats table entry	Sequence of lldp StatsRx PortEntry	N/A	1.0.8802.1.1.2.1.2.7.1
Lldp StatsRx PortNum	This is actual port number (in IP10, 1-8) The index value used to identify the port component associated with this entry. The value of this object is used as a port index to the lldpStatsTable.	Integer [1- 4096]	Read-only	1.0.8802.1.1.2.1.2.7.1.1
Lldp StatsRx PortFrames DiscardedTotal	The number of LLDP frames received by this LLDP agent on the indicated port, and	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.7.1.2

	then discarded for any reason.			
Lldp StatsRx PortFrames Errors	The number of LLDP frames received by this LLDP agent on the indicated port, and then discarded for any reason.	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.7.1.3
Lldp StatsRx PortFrames Total	The number of valid LLDP frames received by this LLDP agent on the indicated port, while this LLDP agent is enabled.	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.7.1.4
Lldp StatsRx PortTLVs DiscardedTotal	The number of LLDP TLVs discarded for any reason by this LLDP agent on the indicated port.	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.7.1.5
Lldp StatsRx PortTLVs UnrecognizedTotal	The number of LLDP TLVs received on the given port that are not recognized by this LLDP agent on the indicated port.	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.7.1.6
Lldp StatsRx PortAgeoutsTotal	The counter that represents the number of age-outs that occurred on a given port. This counter should be set to zero during agent initialization and its value should not be saved in non-volatile storage. When a port's admin status changes from 'disabled' to 'rxOnly', 'txOnly' or 'txAndRx', the counter associated with the same port should reset to 0.	Integer [0-max]	Read-only	1.0.8802.1.1.2.1.2.7.1.7

	The agent should also flush all remote system information associated with the same port. This counter should be incremented only once when the complete set of information is invalidated (aged out) from all related tables on a particular port.			

4.8.1.3 lldpLocalSystemData

Table index: lldpLocManAddrSubtype, lldpLocManAddr

Parameter	Description	Syntax	Access	OID
Lldp Loc ManAddr Table	Management address information on the local system.	Sequence of lldpLoc ManAddrEntry	N/A	1.0.8802.1.1.2.1.3.8

lldpLocManAddrTable

Table index: lldpLocManAddrSubtype, lldpLocManAddr

Parameter	Description	Syntax	Access	OID
Lldp Loc ManAddr Entry	Management address information table entry.	Sequence of lldpLoc ManAddrEntry	N/A	1.0.8802.1.1.2.1.3.8.1
Lldp LocMan Addr	The IP address used to identify the management address component associated with the local system.	IP address	Read-only	1.0.8802.1.1.2.1.3.8.1.2

4.8.1.4 lldpRemoteSystemData

Table index: lldpRemTimeMark lldpRemLocalPortNum, lldpRemIndex

Parameter	Description	Syntax	Access	OID
Lldp Rem Table	Remote connection table.	Sequence of lldpRemEntry	N/A	1.0.8802.1.1.2.1.4.1

Lldp Rem ManAddr Table	Remote connection table.	Sequence of lldpRem ManAddrEntry	N/A	1.0.8802.1.1.2.1.4.2

lldpRemoteTable

Table index: lldpRemTimeMark lldpRemLocalPortNum, lldpRemIndex

Parameter	Description	Syntax	Access	OID
Lldp Rem Entry	Remote connection table entry.	Sequence of lldpRemEntry	N/A	1.0.8802.1.1.2.1.4.1.1
Lldp Rem TimeMark	A time filter for this entry.	Integer [0-max]	N/A	1.0.8802.1.1.2.1.4.1.1.1
Lldp Rem LocalPortNum	The index value used to identify the port component associated with this entry.	Integer [1-4096]	Read-only	1.0.8802.1.1.2.1.4.1.1.2
Lldp Rem Index	An agent is encouraged to assign monotonically increasing index values to new entries, starting with one, after each reboot. It is considered unlikely that the lldpRem Index will wrap between reboots.	Integer [1-max]	Read-only	1.0.8802.1.1.2.1.4.1.1.3
Lldp Rem PortId	The string value used to identify the port component associated with the remote system.	lldpPortId	Read-only	1.0.8802.1.1.2.1.4.1.1.7
Lldp Rem PortDesc	The string value used to identify the description of the given port associated with the remote system.	SlotID*10+PortNumber	Read-only	1.0.8802.1.1.2.1.4.1.1.8
Lldp Rem SysName	System-name of the peer (IP10)	SnmpAdminString Size [0-255]	Read-only	1.0.8802.1.1.2.1.4.1.1.9

Lldp Rem SysDesc	The string value used to identify the system description of the remote system.	SnmpAdminString Size: [0-255]	Read-only	1.0.8802.1.1.2.1.4.1.1.10
Lldp Rem SysCapSupported	The bitmap value used to identify which system capabilities are supported on the remote system.	Integer other [0] repeater [1] bridge [2] wlanAccessPoint [3] router [4] telephone [5] docsisCableDevice [6] stationOnly [7]	Read-only	1.0.8802.1.1.2.1.4.1.1.11

lldpRemManAddrTable

Table indexes: lldpRemTimeMark, lldpRemLocalPortNum, lldpRemIndex, lldpRemManAddrSubtype, lldpRemManAddr

Parameter	Description	Syntax	Access	OID
Lldp Rem ManAddr Entry	Remote connection table entry.	Sequence of lldpRem ManAddrEntry	N/A	1.0.8802.1.1.2.1.4.2.1
Lldp Rem ManAddr Subtype	The type of management address identifier encoding used in the associated lldpRem ManagmentAddr Object.	Integer Other [-1] ipV4 [1] ipV6 [2]	Read-only	1.0.8802.1.1.2.1.4.2.1.1
Lldp Rem ManAddr	The string value used to identify the management address component associated with the remote system.	IP address	N/A	1.0.8802.1.1.2.1.4.2.1.2

5. Common tasks

This chapter explains how to use the IP10-G MIB file to control common tasks that are found in the IP10-G Web Management Server.

The task descriptions in this chapter are presented from a functional perspective and represent how the commands and parameters would be used in a GUI or according to a common workflow. Each task description contains a step by step procedure that explains how to use the MIB objects to perform that task. In some cases all of the MIB objects that are required for a function are grouped together in the MIB tree and at other times they are not. This section is intended to provide a reference for everything that you need to know to implement a particular area of functionality.

5.1 Software management

5.1.1 Downloading a software version

The IP10-G MIB file allows you to control the software download for the IP10-G.

5.1.1.1 Software download procedural overview

This section describes the required procedure to download the software package for the IDU and RFU.

To download and install a new software version for the IDU:

1. Configure the FTP parameters.
2. Download the desired software files with the genEquipMngSwCommand Download (2) command. The new software files are added to the library.
3. Verify that the download status in the genEqipMngSwDownloadStatus object. The status should be inProgress (1).
4. Verify that the download has succeeded in the genEqipMngSwDownloadStatus object. The status should be Success (2).
5. Install and upgrade the new software version with the genEquipMngSwCommand Upgrade (3) command.
   - The IP10-G automatically resets and applies the changes to all slots.
6. Verify that the IDU is using the downloaded version. The version numbers are located in the genEquipMngSwInstalledIduVersion object.

5.1.1.2 Configuring FTP parameters

The new software versions are located on a remote FTP server. In order to download a new software version, you must configure the parameters of this server.

MIB objects for configuring FTP parameters

Parameter	Function	OID
genEquipMngSwServerURL	URL of the remote software update server.	1.3.6.1.4.1.2281.10.4.1.1
genEquipMngSwServerLogin	Login name for the remote software update server.	1.3.6.1.4.1.2281.10.4.1.2
genEquipMngSwServerPassword	Password for the remote software update server.	1.3.6.1.4.1.2281.10.4.1.3

5.1.1.3 Managing IDU software versions

There are three commands that help you control the software versions: Download, Upgrade and Rollback. The genEquipMngSwCommand MIB object has four values which execute four different commands:

- No operation (0)
- Download (1) – download newer packages from the remote server.
- Upgrade (2) – upgrade and install the downloaded packages.
- Rollback (3) – undo the most recent IP10-G IDU software upgrade operation.

Managing IDU software versions MIB object

Parameter	Function	OID
genEquipMngSwCommand	Commands that can be executed to manage software versions: • No Operation (0) • Download (1) • Upgrade (2) • Rollback (3)	1.3.6.1.4.1.2281.10.4.1.9

5.1.1.4 Checking IDU software status

You can check the status of the most recent software download and installation. The genEqipMngSwDownloadStatus and genEqipMngSwInstallStatus object displays one of four values to indicate the software status:

- Ready (0)
- In Progress (1)
- Success (2)
- Failure (3)

You can use the genEquipMngSwInstalledIduVersion parameters to confirm which version of software for the IDU is currently running.

MIB objects for checking IDU software status

Parameter	Function	OID
genEquipMngSwDownloadStatus	Displays the status of the most recent software download.	1.3.6.1.4.1.2281.10.4.1.7
genEquipMngSwInstallStatus	Displays the status of the most recent software installation.	1.3.6.1.4.1.2281.10.4.1.8
genEquipMngSwInstalledIduVersion	Indicates the software version number for the IDU.	1.3.6.1.4.1.2281.10.4.1.10

5.1.2 Downgrading a software version

This feature is currently not supported by SNMP controls.

5.1.3 Upgrading the RFU software version

The software package that is downloaded also includes the necessary software to upgrade the RFUs.

When upgrading the software version for the RFUs, each RFU must be upgraded individually.

Upgrading the RFU and IDU are different procedures. When you upgrade the IDU, the main unit automatically applies the necessary upgrade to all of the slots.

5.1.3.1 RFU software upgrade procedural overview

This section describes the required procedure to install the new software package for the IP10-G RFU.

To install a new software version for the RFU:

1. Download the desired software files.
2. Install and upgrade the new software version with the genEquipRfuUploadSwCommand Upload SW (1) command.
3. Verify that the upgrade status in the genEqipRfuUploadSwStatus object. The status begins as Load Start (2) and continues with Load Send Block (3).
4. Verify that the upgrade has completed in the genEqipRfuUploadSwStatus object. The status should be Load Done (5).
5. Verify that the RFU is using the new software version. The version numbers are located in the genEquipMngSwInstalledRfuVersion object.
6. Repeat this procedure for each RFU in the system.

5.1.3.2 Upgrading RFU software version

The genEquipRfuUploadSwCommand MIB object has two values which controls the software upgrade for the RFU:

- Upload SW (1) – uploads newer packages to the RFU
- No Operation (2) – performs no action

Upgrading RFU software version MIB oject

Parameter	Function	OID
genEquipRfuUploadSwCommand	This command initiates the software upload to the RFU • Upload software (1) • No Operation (2)	1.3.6.1.4.1.2281.10.5.3.1.2

5.1.3.3 Checking RFU software status

You can check the status of the most recent software download and installation. The genEqipRfuUploadSwStatus object displays one of five values to indicate the RFU software upgrade status:

- No Load (0)
- Load Error (1)
- Load Start (2)
- Load Send Block (3)
- Load Done (5)

You can use the genEquipMngSwInstalleRfuVersion parameters to confirm which version of software for the RFU is currently running.

MIB objects for checking RFU Software Status

Parameter	Function	OID
genEquipRfuUploadSwStatus	Status of the software upload operation on the RFU	1.3.6.1.4.1.2281.10.5.3.1.3
genEquipMngSwInstalledRfuVersion	Indicates the software version number for the RFU	1.3.6.1.4.1.2281.10.4.1.11

5.2 Configuration file management

The IP10-G MIB file allows you to view the current configuration of the IP10-G IDU. It also allows you to create backup files of the system configuration and upload them to a FTP server. You can then download the archived backup file for later use.

5.2.1 System configuration FTP settings

The archived system configurations are stored on a FTP server. The server saves the file that contains the existing configuration. You can download the system configuration file and install it on the desired system when necessary.

The FTP settings must be set in the MIB file before you can use the FTP server.

Software download FTP parameters are located in genEquipMngSw.

MIB objects for configuring FTP settings

Parameter	Function	OID
genEquipSecurityXFTPHostIP	Configures the host IP address of the FTP server.	1.3.6.1.4.1.2281.10.11.1.10.1
genEquipSecurityXFTPHostPath	Configures the path of the host directory on the FTP server.	1.3.6.1.4.1.2281.10.11.1.10.2
genEquipSecurityXFTPProtocol	Configures FTP or SFTP protocol is used.	1.3.6.1.4.1.2281.10.11.1.10.3
genEquipSecurityXFTPUserName	Configures the required user name for the FTP server.	1.3.6.1.4.1.2281.10.11.1.10.4
genEquipSecurityXFTPPassword	Configures the required password for the FTP server.	1.3.6.1.4.1.2281.10.11.1.10.5

5.2.2 Creating and uploading backup configuration archives

To create a backup file which contains all the details of the current IP10-G IDU configuration use genEquipMngCfgCommand with a value of (1) Backup.

The following table shows the relevant parameter.

Creating configuration archive MIB object

Parameter	Function	OID
genEquipMngCfgCommand	Executes the Backup system configuration commands: • Backup (1)	1.3.6.1.4.1.2281.10.4.2.5

5.2.2.1 Procedural overview of uploading a system configuration

This section describes the required procedure to save the current system configuration of the IP10-G and upload it to a FTP server.

To save and upload the current system configuration:

1. Verify the FTP settings as described in section 5.2.1.
2. Create the archive files of the current system configuration. The genEquipMngCfgCommand with Backup (1) command creates a separate archive file for each slot in the system.
3. Verify the backup status in the genEqipMngCfgBackupStatus object. The status should be inProgress (1).
4. Verify that the backup has succeeded in the genEqipMngCfgBackupStatus object. The status should be Success (2).
5. Upload the archive files to the FTP server with the genEquipMngCfgCommand with Upload (3) command.
6. Verify the upload status in the genEqipMngCfgUploadStatus object. The status should be inProgress (1).
7. Verify that the upload to the FTP server has succeeded in the genEqipMngCfgUploadStatus object. The status should be Success (2).

5.2.2.2 Uploading an archived configuration

To upload an archived configuration of the IP10-G IDU to an FTP server use genEquipMngCfgCommand with a value of (3) Upload.

Uploading archived configuration MIB object

Parameter	Function	OID
genEquipMngCfgCommand	Executes commands to upload the archive to the FTP server • Upload (3)	1.3.6.1.4.1.2281.10.4.2.5

5.2.2.3 Backup and upload status

The genEquipMngCfgBackupStatus and genEquipMngCfgUploadStatus objects display that backup and upload status of the system configuration.

Backup and upload status MIB object

Parameter	Function	OID
genEquipMngCfgBackupStatus	Status of the configuration backup file to the IDU.	1.3.6.1.4.1.2281.10.4.2.5
genEquipMngCfgUploadStatus	Status of uploading the configuration backup file to the FTP server.	1.3.6.1.4.1.2281.10.4.2.5

5.2.3 Downloading and restoring archived configurations

You can download an archived configuration of the IP10-G IDU from an FTP server and then restore the previous configuration.

5.2.3.1 Procedural overview of downloading and restoring a system configuration

This section describes the required procedure to download a previous system configuration from a FTP server and restore it to the IP10-G.

The downloaded configuration must be the same version as the IP10-G IDU.

To download and restore a previous system configuration:

1. Verify the FTP settings as described in section 5.2.1.
2. Download the desired archive files of the system configuration from the FTP server. The genEquipMngCfgCommand with Download (4) command downloads all the backup files for the system.
   - Download all of the backup files that are located on the server even if there are fewer slots in the current configuration. The IP10-G automatically installs the necessary files from the download.
3. Verify the download status in the genEqipMngCfgDownloadStatus object. The status should be inProgress (1).
4. Verify that the download has succeeded in the genEqipMngCfgDownloadStatus object. The status should be Success (2).
5. Restore the archive files to the IP10-G with the genEquipMngCfgCommand with Restore (2) command.
6. Verify the restore status in the genEqipMngCfgRestoreStatus object. The status should be inProgress (1).
7. Verify that the configuration is successfully restored to the IP10-G in the genEqipMngCfgRestoreStatus object. The status should be Success (2).

5.2.3.2 Downloading a backup configuration file

To download an archived configuration from an FTP server use genEquipMngCfgCommand object with a value of (4) Download.

The downloaded configuration must be the same version as the IP10-G IDU.

Downloading an archived configuration file MIB object

Parameter	Function	OID
genEquipMngCfgCommand	• Download (4) – downloads the configuration archive from the FTP server.	1.3.6.1.4.1.2281.10.4.2.5

5.2.3.3 Restoring a configuration

To restore an archived configuration from an FTP server use genEquipMngCfgCommand object with a value of (2) Restore.

The downloaded configuration must be the same version as the IP10-G IDU.

Restoring a configuration MIB object

Parameter	Function	OID
genEquipMngCfgCommand	• Restore (2) – restores the system settings to the archived configuration.	1.3.6.1.4.1.2281.10.4.2.5

5.2.3.4 Restoring the default configuration

You can restore the default configuration of the IP10-G IDU. However, there is the option to keep the current network parameters when the default configuration is installed. The genEquipMngSetToDefaultKeepIp object uses the following command to restore the default configuration:

- Off – Default configuration is restored without the current network parameters
- On – Default configuration is restored with the current network parameters

Restoring Default Configuration MIB object

Parameter	Function	OID
genEquipMngSetToDefaultKeepIp	Restores the default configuration of the IDU with or without saving the current network parameters • Off (0) • On (1)	1.3.6.1.4.1.2281.10.4.2.7

5.2.3.5 Checking download and restore status

The genEquipMngCfgDownloadStatus and genEquipMngCfgRestoreStatus objects display that backup and upload status of the system configuration.

Download and restore status MIB object

Parameter	Function	OID
genEquipMngCfgDownloadStatus	Status of downloading the configuration backup file from the FTP server	1.3.6.1.4.1.2281.10.4.2.5
genEquipMngCfgRestoreStatus	Status of restoring the configuration backup file to the IDU	1.3.6.1.4.1.2281.10.4.2.5

5.3 Enabling and configuring traps

This section explains how to use the MIB file to configure the traps sent from a Network Element to the IP10-G.

5.3.1 Enabling trap administration

To change the setup for a trap, you must enable the administrative state for the specific trap manager.

The MIB object in the following table uses the GenEquipTrapCfgMgrId index object.

Enabling Trap administration

Parameter	Function	OID
genEquipTrapCfgMgrAdmin	Set to Enable (2) in order to configure a specific trap manager.	1.3.6.1.4.1.2281.10.3.2.1.1.2

5.3.2 Managing a trap

To manage a specific trap, you can configure the following parameters:

- Trap manager IP address to which the traps are sent.
- Port number that sends the trap.
- Name of the trap manager.
- Community name to trap forwarding.
- Period (in minutes) of the heartbeat trap.
- CLLI (Common Language Location Identifier) free text that is sent with the trap.

The MIB objects in the following table use the GenEquipTrapCfgMgrId index object.

Managing a trap

Parameter	Function	OID
genEquipTrapCfgMgrIP	Configures the trap manager's IP address.	1.3.6.1.4.1.2281.10.3.2.1.1.3
genEquipTrapCfgMgrPort	Configures the port that sends the trap for each manager.	1.3.6.1.4.1.2281.10.3.2.1.1.4
genEquipTrapCfgMgrName	Configures the name of the manager that receives the traps.	1.3.6.1.4.1.2281.10.3.2.1.1.5
genEquipTrapCfgMgrCommunity	Configures the name of the manager community that receives the traps.	1.3.6.1.4.1.2281.10.3.2.1.1.6
genEquipTrapCfgMgrCLLI	Configures the Common Language Location Identifier (CLLI).	1.3.6.1.4.1.2281.10.3.2.1.1.9
genEquipTrapCfgMgrHeartbeatPeriod	Configures the minute interval between each heartbeat.	1.3.6.1.4.1.2281.10.3.2.1.1.10

5.3.3 Configuring trap severity

Two configurations use trap severity:

- Traps are filtered according to a specified severity.
- Repeated traps are filtered and only traps of a different severity level are sent.

Traps are classified according to six categories of severity:

- Indeterminate
- Critical
- Major
- Minor
- Warning
- Cleared

The MIB objects in the following table use the GenEquipTrapCfgMgrId index object.

Configuring trap severity

Parameter	Function	OID
genEquipTrapCfgMgrSeverityFilter	Configures the severity level of traps that are sent: • Bit 1 – Indeterminate • Bit 2 – Critical • Bit 3 – Major • Bit 4 – Minor • Bit 5 – Warning • Bit 6 – Cleared	1.3.6.1.4.1.2281.10.3.2.1.1.7
genEquipTrapCfgMgrStatusChangeFilter	Enables or disables filtering alarms according to a change in the trap severity filter. When the value = "On" repeated traps of the same severity are NOT sent - only traps that raised with a different severity are sent.	1.3.6.1.4.1.2281.10.3.2.1.1.8

5.4 Switch configuration

You can use the MIB file to manage the Ethernet switch configurations.

5.4.1 Adding and removing VLANs from the database

When you add or remove rows to the genEquipEthernetSwitchCfgVIDTable, you are adding or removing VLANs from the database.

5.4.2 Setting the Ethernet application type

You can set one of the following Ethernet application types on the IP10-G:

- **Single pipe** - Ethernet switching is disabled, whereby only a single Ethernet interface is used for traffic and the unit operates as a point-to-point microwave Ethernet radio.
- **Managed switch** - For Layer 2 802.1Q switching. Requires a license.
- **Metro switch** - Enables Ethernet Q-in-Q provider switch. Requires a license.

Ethernet application type MIB object

Parameter	Function	OID
genEquipEthernetSwitchCfgAppType	Selects the application type: • Single pipe (1) • Managed switch (2) • Metro switch (3)	1.3.6.1.4.1.2281.10.8.1.1.1

5.4.3 Configuring the VLANs

You can configure the settings of the VLANs.

Configuring VLAN IDs MIB object

Parameter	Function	OID
genEquipEthernetSwitchCfgVIDIndex	Sets the VLAN number.	1.3.6.1.4.1.2281.10.8.1.1.2.1.1
genEquipEthernetSwitchCfgVIDName	Sets the name of the VLAN.	1.3.6.1.4.1.2281.10.8.1.1.2.1.2
genEquipEthernetSwitchCfgVIDState	Configures the VLAN state: • Invalid (0) • Suspend (1) • Active (2)	1.3.6.1.4.1.2281.10.8.1.1.2.1.3
genEquipEthernetSwitchCfgVIDPorts	Sets the port members of the VLAN.	1.3.6.1.4.1.2281.10.8.1.1.2.1.4

5.5 Viewing current alarms

You can view the current alarms in the system.

5.5.1 Alarm date and time

You can view the date and time that an alarm was raised.

Alarm date and time MIB object

Parameter	Function	OID
genEquipCurrentAlarmRaisedTimeT	Time the alarm was raised.	1.3.6.1.4.1.2281.10.3.1.2.1.2

5.5.2 Alarm severity

You can view the alarm severity.

Alarm severity MIB object

Parameter	Function	OID
genEquipCurrentAlarmSeverity	Severity of the current alarm: • Indeterminate (0) • Critical (1) • Major (2) • Minor (3) • Warning (4) • Cleared (5)	1.3.6.1.4.1.2281.10.3.1.2.1.6

5.5.3 Affected module

You can view which module is affected by the alarm.

Affected module MIB object

Parameter	Function	OID
genEquipCurrentAlarmModule	Module of the alarm.	1.3.6.1.4.1.2281.10.3.1.2.1.8

5.5.4 Alarm description

You can view the description of the alarm.

Alarm description MIB object

Parameter	Function	OID
genEquipCurrentAlarmDesc	Description of the alarm.	1.3.6.1.4.1.2281.10.3.1.2.1.9

5.5.5 Probable cause

You can view the probable cause for the alarm.

Probable alarm cause MIB object

Parameter	Function	OID
genEquipCurrentAlarmProbableCause	Probable cause of the alarm.	1.3.6.1.4.1.2281.10.3.1.2.1.10

5.5.6 Corrective actions

You can view the recommended corrective actions to solve the problem that caused the alarm.

Corrective actions MIB object

Parameter	Function	OID
genEquipCurrentAlarmCorrectiveActions	Corrective actions that should be taken	1.3.6.1.4.1.2281.10.3.1.2.1.11

5.6 Performance monitoring and counters

You can use the MIB file to configure and retrieve the performance monitoring data of the IP10.

5.6.1 Ethernet performance on the radio link

The genEquipPmRadioEthernetTable contains the references to the indexes and MIB objects that are needed to view the performance monitoring data for the Ethernet Radio link.

Ethernet radio performance monitoring

Parameter	Function	OID
genEquipRadioEthernetPmType	Configures which PM table is accessed.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.1
ifIndex	Configures which interface or port is monitored.	1.3.6.1.2.1.2.2.1.1
genEquipRadioEthernetPmType	Configures the time interval of the PM.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.2
genEquipPmRadioEthernetFrameErrorRate	Percentage of received frames that contained errors.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.3
genEquipPmRadioEthernetPeakThroughput	Maximum Ethernet throughput measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.4
genEquipPmRadioEthernetAverageThroughput	Average Ethernet throughput measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.5
genEquipPmRadioEthernetExceedThroughput	Number of seconds that the Ethernet throughput exceeded the threshold.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.6
genEquipPmRadioEthernetPeakCapacity	Maximum Ethernet capacity measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.7

Parameter	Function	OID
genEquipPmRadioEthernetAverageCapacity	Average Ethernet capacity measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.8
genEquipPmRadioEthernetExceedCapacity	Number of seconds that the Ethernet capacity exceeded the threshold.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.9
genEquipPmRadioEthernetPeakUtilization	Maximum Ethernet utilization measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.10
genEquipPmRadioEthernetAverageUtilization	Average Ethernet utilization measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.11
genEquipPmRadioEthernetExceedUtilization	Number of seconds that the Ethernet utilization exceeded the threshold.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.12
genEquipPmRadioEthernetIDF	Invalid data flag value.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.13

5.6.2 Clearing all performance counter data

You can use the genEquipPmClear command to clears the values for all of the performance monitoring tables.

The Object ID is: `1.3.6.1.4.1.2281.10.6.3.1`.

5.7 Managing radio configuration

You can use the MIB file to manage the radio configuration data of the IP10.

5.7.1 Setting the RSL threshold

This section explains how to set the maximum Received Signal Level (RSL) thresholds. After the thresholds are set, the system records the number of seconds that each of them was exceeded.

Setting RSL threshold

Parameter	Function	OID
genEquipRadioEthernetPmType	Configures which PM table is accessed.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.1
ifIndex	Configures which interface or port is monitored.	1.3.6.1.2.1.2.2.1.1
genEquipRadioEthernetPmType	Configures the time interval of the PM.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.2
genEquipPmRadioEthernetFrameErrorRate	Percentage of received frames that contained errors.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.3
genEquipPmRadioEthernetPeakThroughput	Maximum Ethernet throughput measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.4
genEquipPmRadioEthernetAverageThroughput	Average Ethernet throughput measured during the last interval.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.5
genEquipPmRadioEthernetExceedThroughput	Number of seconds that the Ethernet throughput exceeded the threshold.	1.3.6.1.4.1.2281.10.6.3.4.3.1.1.6

6. MIB error table

This section contains a description of all the Error messages for the IP10-G according to their error numbers.

If there are any errors related to the IP10-G, an errno is generated. Check the errno description in the following table to find a textual description of the error.

The table contains two columns:

- **Errno Fault Number** – genEquipFaultErrno (OID 1.3.6.1.4.1.2281.10.3.4)
- **Errno Description** – genEquipFaultErrDescr (OID 1.3.6.1.4.1.2281.10.3.5)

Error table

Errno fault number	Errno description
1	Set exceeds maximum value.
2	Set exceeds minimum value.
3	Invalid set value.
4	Set operation failed.
5	Notification failed.
6	Parameter not found.
7	Entity not found.
8	SW error: thread context.
9	No privilege.
10	Bad instance.
11	Wrong parameter type.
12	Cannot read from file.
13	Cannot write to file.
14	SW error: bad parameter.
15	Command not found.
16	Command Timeout.
17	Peer Disconnected.
18	String length exceeded.
19	Unable to delete user.
20	Bad character in input line.
1000	License violation: ACM.
1001	License violation: Ethernet Application.

Errno fault number	Errno description
1002	Cannot re-install: kernel package not installed.
1003	**Warning:** You are changing some license features! If you choose to apply: Please verify that the current configuration does not violate the new license. **Note:** Clicking **Apply** also reboots the system.
1004	Invalid license code entered.
2000	Management VLAN cannot be removed or disabled.
2001	VLAN ID is not a member of the VLAN database.
2002	VLAN ID is not included in the port's allowed list.
2003	Maintenance Intermediate Points (MIPs) are not supported in Single Pipe configuration.
2004	MAC address cannot be a broadcast or multicast address.
2005	Remote Maintenance End Point (RMEP) already exists, please delete it in order to modify.
2006	Maintenance domain (MD) name is not a member of the MD database.
2007	Maintenance domain (MD) name is already a member of the MD database.
2008	Maintenance domain (MD) level is already a member of the MD database.
2009	Maintenance domain (MD) level does not match.
2010	Maintenance association (MA) name is not a member of the MA database.
2011	Maintenance association (MA) name is already a member of the MA database.
2012	Remote maintenance end point (RMEP) is not a member of the Remote MEPs database.
2013	Remote maintenance end point (RMEP) values are different than those in the Remote MEPs database.
2014	Port type does not support this feature.
2015	Illegal Rate (Less than 1Mbps - 64K Steps, Less than 100Mbps - 1M Steps, Less than 1Gbps - 10M Steps (GbE Ports Only)).
2016	One or more VLAN ID is not a member of the VLAN database.
2017	Failed to add maintenance association (MA) to maintenance domain (MD).
2018	Invalid MAC address.
2019	Number of ring RSTP non-edge ports exceeded.
2020	Maintenance intermediate point (MIP) was already added to this port.
2021	Maintenance intermediate point (MIP) was not added to this port.
2022	Maintenance end point (MEP) already exists with different direction.

Errno fault number	Errno description
2023	Maximum number of maintenance end points (MEPs) exceeded.
2024	Maximum number of remote maintenance end points (RMEPs) exceeded.
2025	Maintenance end point (MEP) is not a member of the MEPs database.
2026	Maintenance domain (MD) name has exceeded its maximum length (20 characters).
2027	Maintenance association (MA) name has exceeded its maximum length (20 characters).
2028	Some VLANs were not added successfully.
2029	Some VLANs were not removed successfully.
2030	Maximum number of policers exceeded.
2031	A remote maintenance end point (RMEP) with the same ID already exists.
2032	A maintenance end point (MEP) with the same ID already exists.
2033	Policer class name is already in use.
2034	The priority value must be in multiples of 4096.
2035	The priority value must be in multiples of 16.
2036	VLANs were not added successfully.
2037	VLANs were not removed successfully.
2038	Policer does not exist.
2039	Policer class does not exist.
2040	Policer already exists.
2041	Bad character in input line.
2042	Forwarding delay time exceed its constraint: Max Age <= 2 * (Forward Delay - 1).
2043	Maximum ageing time exceed its constraints: Max Age >= 2 * (Hello Time + 1) Max Age <= 2 * (Forward Delay - 1)
2044	Cannot delete policer class – policer might be attached to a port.
3000	Public key creation failed.
3001	Upload file failed.
3002	Download file failed.
3003	Certificate file validation failed.
3004	Certificate file not found.
3005	CA certificate file not found.
3006	Wrong certificate file format.

Errno fault number	Errno description
3007	CLI configuration script file was not found.
3008	CLI configuration script file name was not entered.
5000	Unknown or missing option.
5001	Illegal password: Password must be at least 8 characters long.
6000	Reference class does not match maximum profile. Please make sure that maximum profile falls into the correct reference class category.
6100	Invalid option.
6101	Too few parameters in command.
6102	Non-existent/missing port.
6103	Port is already a LAG member.
6104	Not a traffic port.
6105	Port rate (GBE/FE) does not match LAG's configuration.
6106	Port connector type does not match LAG's configuration.
6107	Port has MEPS.
6108	Port has MIPS.
6109	Port type does not match LAG's configuration.
6110	Port allowed VLANs do not match LAG's configuration.
6111	Port default VLAN does not match LAG's configuration.
6112	Port classifying initial criteria (QoS) does not match LAG's configuration.
6113	Port default priority override (QoS) does not match LAG's configuration.
6114	Port VLAN P-bits priority remap (QoS) does not match LAG's configuration.
6115	Port classifier VID override priority (QoS) does not match LAG's configuration.
6116	Port classifier MAC DA override (QoS) does not match LAG's configuration.
6117	Port scheduling scheme (QoS) does not match LAG's configuration.
6118	Port Ethernet rate does not match LAG's configuration.
6119	Port duplex does not match LAG's configuration.
6120	Port auto-negotiation does not match LAG's configuration.
6121	Port flow control does not match LAG's configuration.
6122	Port admin state does not match LAG's configuration.
6123	Port learning state does not match LAG's configuration.
6124	Port aging time does not match LAG's configuration.
6125	Port is not a member of LAG-port.

Errno fault number	Errno description
6126	Port is a member of LAG-port.
6127	Port edge setting does not match LAG's configuration.
6128	Radio port cannot be aggregated to a LAG with admin disabled.
6129	LAG contains MEPs.
6130	LAG contains MIPs.
6131	LAG contains MEPs or MIPs.
6132	Nonexistent/missing LAG-port.
6133	Too many parameters in command.
6134	Port contains MEPs or MIPs.
6135	Port priority setting does not match LAG's configuration.
6136	Port path cost setting does not match LAG's configuration.
6137	LAG member may be admin enabled only if LAG-port is admin enabled.
6138	Radio Ethernet interface cannot be disabled. Please remove interface from LAG.
6139	Radio Ethernet was configured as disabled. Please enable in order to add to LAG.
6140	LAG-port must be created as full-duplex.
7000	Web server admin is disabled, hence can not be restarted.
8000	QoS priority should be set for the management VLAN.
9001	Invalid Trail src edge equal dest edge.
9002	Invalid Trail dest edge equal dest edge.
9003	Invalid Trail Line to Line on the same slot.
9004	Invalid Trail Radio to Radio on the same slot.
9005	Invalid Trail SNCP configuration.
9006	Error: up to 180 TDM trails allowed.
9007	Invalid Trail: Invalid Source slot.
9008	Invalid Trail: Invalid Destination slot.
9009	Invalid Trail: Invalid Source Interface Number.
9010	Invalid Trail: Invalid Destination Interface Number.
9011	Invalid Trail: Invalid Source Interface Type.
9012	Invalid Trail: Invalid Destination Interface Type.
9013	Invalid Trail ID definition: all trail IDs must be unique.
9014	Invalid Trail: Source Interface in use.

Errno fault number	Errno description
9015	Invalid Trail: Destination Interface in use.
9016	Invalid Trail: maximum number of trails has been reached.
9017	Invalid Trail STM1 to STM1 on the same slot.
9018	Invalid Trail definition: two line interfaces cannot be defined in the same extension unit.
9019	Protected TDM trails not allowed by current license.
9020	No synchronization sources allowed by current license.
9200	Interface does not belong to a TDM trail.
9201	Desired interface is unavailable; may be disabled or missing.
9203	Sync interface must belong to unprotected trail.
9204	Sync interface must belong to operational (non-reserved) trail.
9206	Trail used as synchronization source cannot be inactivated or changed. Please change synchronization source first.
9207	Trail used as synchronization source cannot be inactivated or changed. Please change synchronization source first.
9300	Mismatch between local IP and floating IP addresses: addresses must differ and be within defined same subnet.
9400	**Warning:** Radio Ethernet interface is associated with one or more Ethernet applications: CFM, xSTP, rate limiting policy.