

5/4/2024 12:41:51 PM

# Compare Results

Old File:

**d1p2mib.pdf**

**127 pages (186 KB)**

5/4/2024 12:41:12 PM

versus

New File:

**prop\_d1p3mib.pdf**

**123 pages (181 KB)**

5/4/2024 12:39:36 PM

## Total Changes

**355**

## Content

**96** Replacements

**139** Insertions

**120** Deletions

## Styling and Annotations

**0** Styling

**0** Annotations

[Go to First Change \(page 7\)](#)

IEEE8023-DOT3-LLDP-EXT-V2-MIB DEFINITIONS ::= BEGIN

IMPORTS

```
ifGeneralInformationGroup
    FROM IF-MIB
lldpV2LocPortIfIndex, lldpV2PortConfigEntry, lldpV2RemIndex,
lldpV2RemLocalDestMACAddress, lldpV2RemLocalIfIndex,
lldpV2RemTimeMark
    FROM LLDP-V2-MIB
LldpV2PowerPortClass
    FROM LLDP-V2-TC-MIB
MODULE-COMPLIANCE, OBJECT-GROUP
    FROM SNMPv2-CONF
Integer32, MODULE-IDENTITY, OBJECT-TYPE, Unsigned32, org
    FROM SNMPv2-SMI
TruthValue
    FROM SNMPv2-TC;
```

ieee8023lldpV2Xdot3MIB MODULE-IDENTITY

LAST-UPDATED "202307310000Z"

ORGANIZATION

"IEEE 802.3 Working Group"

CONTACT-INFO

" WG-URL: <http://www.ieee802.org/3/index.html>

WG-EMail: <mailto:stds-802-3-dialog@ieee.org>

Contact: IEEE 802.3 Working Group Chair

Postal: C/O IEEE 802.3 Working Group

IEEE Standards Association

445 Hoes Lane

Piscataway, NJ 08854

USA

E-mail: <mailto:stds-802-3-dialog@ieee.org>"

DESCRIPTION

"The LLDP Management Information Base extension module for  
IEEE 802.3 organizationally defined discovery information."

REVISION "202307310000Z"

DESCRIPTION

"Revision, based on an earlier version in IEEE Std 802.3.1-2013  
addressing changes from IEEE Std 802.3 revisions 2012, 2015,

2018,

and 2022."

REVISION "201304110000Z"

DESCRIPTION

"Revision, based on an earlier version in IEEE Std 802.3.1-2011."

REVISION "201102020000Z"

DESCRIPTION

"This revision incorporated changes to the MIB module to  
add objects to support management of Energy Efficient  
Ethernet (EEE) and Enhanced DTE Power via the MDI (PoE+)."

::= { org ieee(111) standards-association-numbers-series-standards(2)  
lan-man-stds(802) ieee802dot3(3) ieee802dot3dot1mibs(1) 5 }

lldpV2Xdot3Objects OBJECT IDENTIFIER

```

 ::= { ieee8023lldpV2Xdot3MIB 1 }

lldpV2Xdot3Config OBJECT IDENTIFIER
 ::= { lldpV2Xdot3Objects 1 }

lldpV2Xdot3PortConfigTable OBJECT-TYPE
 SYNTAX      SEQUENCE OF LldpV2Xdot3PortConfigEntry
 MAX-ACCESS  not-accessible
 STATUS      current
 DESCRIPTION
    "A table that controls selection of LLDP TLVs to be transmitted
    on individual ports."
 ::= { lldpV2Xdot3Config 1 }

lldpV2Xdot3PortConfigEntry OBJECT-TYPE
 SYNTAX      LldpV2Xdot3PortConfigEntry
 MAX-ACCESS  not-accessible
 STATUS      current
 DESCRIPTION
    "LLDP configuration information that controls the
    transmission of IEEE 802.3 organizationally defined TLVs on
    LLDP transmission capable ports.

    This configuration object augments the lldpV2PortConfigEntry of
    the LLDP-MIB, therefore it is only present along with the port
    configuration defined by the associated lldpV2PortConfigEntry
    entry.

    Each active lldpV2Xdot3PortConfigEntry is restored from non-
volatile
    storage (along with the corresponding lldpV2PortConfigEntry)
    after a re-initialization of the management system."
 AUGMENTS   { lldpV2PortConfigEntry }
 ::= { lldpV2Xdot3PortConfigTable 1 }

LldpV2Xdot3PortConfigEntry ::= SEQUENCE {
    lldpV2Xdot3PortConfigTLVsTxEnable  BITS
}

lldpV2Xdot3PortConfigTLVsTxEnable OBJECT-TYPE
 SYNTAX      BITS { macPhyConfigStatus(0), powerViaMDI(1), unused(2),
                    maxFrameSize(3), eeeEnabled(4),
                    eeeFastWakeEnabled(5), addEthernetCapabilities(6) }
 MAX-ACCESS  read-write
 STATUS      current
 DESCRIPTION
    "The lldpV2Xdot3PortConfigTLVsTxEnable, defined as a bitmap,
    includes the IEEE 802.3 organizationally defined set of LLDP
    TLVs whose transmission is allowed by the local LLDP agent by
    the network management. Each bit in the bitmap corresponds
    to an IEEE 802.3 subtype associated with a specific IEEE
    802.3 optional TLV.

    The bit 'macPhyConfigStatus(0)' indicates that the LLDP agent

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should transmit 'MAC/PHY configuration/status TLV'.

The bit 'powerViaMDI(1)' indicates that the LLDP agent should transmit 'Power via MDI TLV'.

The bit 'unused(2)' is no longer used; this was used for the 'Link Aggregation TLV' in the previous version.

The bit 'maxFrameSize(3)' indicates that the LLDP agent should transmit 'Maximum-frame-size TLV'.

The bit 'eeeEnabled(4)' indicates that the LLDP agent should transmit EEE TLV.

The bit 'eeeFastWakeEnabled(5)' indicates that the LLDP agent should transmit EEE Fast Wake TLV.

The bit 'addEthernetCapabilities(6)' indicates that the LLDP agent should transmit Additional Ethernet Capabilities TLV.

The default value for lldpV2Xdot3PortConfigTLVsTxEnable object is an empty set, which means no enumerated values are set.

The value of this object is restored from non-volatile storage after a re-initialization of the management system."

REFERENCE

"IEEE Std 802.3, 30.12.1.1.1"

DEFVAL { {} }

::= { lldpV2Xdot3PortConfigEntry 1 }

lldpV2Xdot3LocalData OBJECT IDENTIFIER

::= { lldpV2Xdot3Objects 2 }

lldpV2Xdot3LocPortTable OBJECT-TYPE

SYNTAX SEQUENCE OF LldpV2Xdot3LocPortEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table contains one row per port of Ethernet port information (as a part of the LLDP 802.3 organizational extension) on the local system known to this agent."

::= { lldpV2Xdot3LocalData 1 }

lldpV2Xdot3LocPortEntry OBJECT-TYPE

SYNTAX LldpV2Xdot3LocPortEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Information about a particular port component."

INDEX { lldpV2LocPortIfIndex }

::= { lldpV2Xdot3LocPortTable 1 }

LldpV2Xdot3LocPortEntry ::= SEQUENCE {

lldpV2Xdot3LocPortAutoNegSupported TruthValue,

```

    lldpV2Xdot3LocPortAutoNegEnabled          TruthValue,
    lldpV2Xdot3LocPortAutoNegAdvertisedCap   OCTET STRING,
    lldpV2Xdot3LocPortOperMauType           Unsigned32
}

lldpV2Xdot3LocPortAutoNegSupported OBJECT-TYPE
    SYNTAX          TruthValue
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The truth value used to indicate whether the given port
        (associated with the local system) supports Auto-negotiation."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.1"
    ::= { lldpV2Xdot3LocPortEntry 1 }

lldpV2Xdot3LocPortAutoNegEnabled OBJECT-TYPE
    SYNTAX          TruthValue
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "The truth value used to indicate whether port
        Auto-negotiation is enabled on the given port associated
        with the local system."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.2"
    ::= { lldpV2Xdot3LocPortEntry 2 }

lldpV2Xdot3LocPortAutoNegAdvertisedCap OBJECT-TYPE
    SYNTAX          OCTET STRING (SIZE(2))
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "This object contains the value (bitmap) of the
        ifMauAutoNegCapAdvertisedBits object (defined in IETF RFC
        3636) which is associated with the given port on the
        local system."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.3"
    ::= { lldpV2Xdot3LocPortEntry 3 }

lldpV2Xdot3LocPortOperMauType OBJECT-TYPE
    SYNTAX          Unsigned32 (0..2147483647)
    MAX-ACCESS      read-only
    STATUS          current
    DESCRIPTION
        "An integer value that indicates the operational MAU type
        of the given port on the local system.

        This object contains the integer value derived from the
        list position of the corresponding dot3MauType as listed
        in Clause 13 and is equal to the last number in the
        respective dot3MauType OID."

```

For example, if the ifMauType object is dot3MauType1000BaseTHD which corresponds to {dot3MauType 29}, the numerical value of this field is 29. For MAU types not listed in Clause 13, the value of this field shall be set to zero."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.4"  
 ::= { lldpV2Xdot3LocPortEntry 4 }

lldpV2Xdot3LocPowerTable OBJECT-TYPE

SYNTAX SEQUENCE OF LldpV2Xdot3LocPowerEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION

"This table contains one row per port of power Ethernet information (as a part of the LLDP IEEE 802.3 organizational extension) on the local system known to this agent."

::= { lldpV2Xdot3LocalData 2 }

lldpV2Xdot3LocPowerEntry OBJECT-TYPE

SYNTAX LldpV2Xdot3LocPowerEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION

"Information about a particular port component."

INDEX { lldpV2LocPortIfIndex }  
 ::= { lldpV2Xdot3LocPowerTable 1 }

LldpV2Xdot3LocPowerEntry ::= SEQUENCE {

lldpV2Xdot3LocPowerPortClass	LldpV2PowerPortClass,
lldpV2Xdot3LocPowerMDISupported	TruthValue,
lldpV2Xdot3LocPowerMDIEnabled	TruthValue,
lldpV2Xdot3LocPowerPairControlable	TruthValue,
lldpV2Xdot3LocPowerPairs	INTEGER,
lldpV2Xdot3LocPowerClass	INTEGER,
lldpV2Xdot3LocPowerType	BITS,
lldpV2Xdot3LocPowerSource	INTEGER,
lldpV2Xdot3LocPowerPriority	INTEGER,
lldpV2Xdot3LocPDRequestedPowerValue	Integer32,
lldpV2Xdot3LocPDRequestedPowerValueA	Integer32,
lldpV2Xdot3LocPDRequestedPowerValueB	Integer32,
lldpV2Xdot3LocPSEAllocatedPowerValue	Integer32,
lldpV2Xdot3LocPSEAllocatedPowerValueA	Integer32,
lldpV2Xdot3LocPSEAllocatedPowerValueB	Integer32,
lldpV2Xdot3LocPSEPoweringStatus	INTEGER,
lldpV2Xdot3LocPDPoweredStatus	INTEGER,
lldpV2Xdot3LocPowerPairsExt	INTEGER,
lldpV2Xdot3LocPowerClassExtA	INTEGER,
lldpV2Xdot3LocPowerClassExtB	INTEGER,
lldpV2Xdot3LocPowerClassExt	INTEGER,
lldpV2Xdot3LocPowerTypeExt	INTEGER,
lldpV2Xdot3LocPDLoad	TruthValue,
lldpV2Xdot3LocPD4PID	TruthValue,
lldpV2Xdot3LocPSEMaxAvailPower	Integer32,
lldpV2Xdot3LocPSEAutoclassSupport	TruthValue,

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lldpV2Xdot3LocPSEAutoclassCompleted      TruthValue,
lldpV2Xdot3LocPSEAutoclassRequest        TruthValue,
lldpV2Xdot3LocPowerDownRequest           Integer32,
lldpV2Xdot3LocPowerDownTime              Integer32,
lldpV2Xdot3LocMeasVoltageSupport         TruthValue,
lldpV2Xdot3LocMeasCurrentSupport         TruthValue,
lldpV2Xdot3LocMeasPowerSupport           TruthValue,
lldpV2Xdot3LocMeasEnergySupport          TruthValue,
lldpV2Xdot3LocMeasurementSource          TruthValue,
lldpV2Xdot3LocMeasVoltageRequest         TruthValue,
lldpV2Xdot3LocMeasCurrentRequest        TruthValue,
lldpV2Xdot3LocMeasPowerRequest           TruthValue,
lldpV2Xdot3LocMeasEnergyRequest          TruthValue,
lldpV2Xdot3LocMeasVoltageValid           TruthValue,
lldpV2Xdot3LocMeasCurrentValid           TruthValue,
lldpV2Xdot3LocMeasPowerValid             TruthValue,
lldpV2Xdot3LocMeasEnergyValid            TruthValue,
lldpV2Xdot3LocMeasVoltageUncertainty     Integer32,
lldpV2Xdot3LocMeasCurrentUncertainty     Integer32,
lldpV2Xdot3LocMeasPowerUncertainty       Integer32,
lldpV2Xdot3LocMeasEnergyUncertainty      Integer32,
lldpV2Xdot3LocVoltageMeasurement        Integer32,
lldpV2Xdot3LocCurrentMeasurement         Integer32,
lldpV2Xdot3LocPowerMeasurement           Integer32,
lldpV2Xdot3LocEnergyMeasurement          Integer32,
lldpV2Xdot3LocPSEPowerPriceIndex        Integer32,
lldpV2Xdot3LocResponseTime               Integer32,
lldpV2Xdot3LocReady                      TruthValue
}

lldpV2Xdot3LocPowerPortClass OBJECT-TYPE
    SYNTAX      LldpV2PowerPortClass
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value that identifies the port Class of the given port
         associated with the local system."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.5"
    ::= { lldpV2Xdot3LocPowerEntry 1 }

lldpV2Xdot3LocPowerMDISupported OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "For a PSE, the truth value used to indicate whether the MDI
         power is supported on the given port associated with the
         local system. For a PD, this attribute is undefined."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.6"
    ::= { lldpV2Xdot3LocPowerEntry 2 }

lldpV2Xdot3LocPowerMDIEnabled OBJECT-TYPE

```

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"For a PSE, the truth value used to identify whether MDI power is enabled on the given port associated with the local system. For a PD, this attribute is undefined."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.7"  
 ::= { lldpV2Xdot3LocPowerEntry 3 }

lldpV2Xdot3LocPowerPairControlable OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"A truth value used to indicate the ability to control which PSE Pinout Alternative (see IEEE Std 802.3, 33.2.3 and 145.2.4) is used for PD detection and power. For a PSE, this attribute contains the value of the aPSEPowerPairsControlAbility attribute (see IEEE Std 802.3, 30.9.1.1.3). For a PD, the contents of this this attribute are undefined."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.8"  
 ::= { lldpV2Xdot3LocPowerEntry 4 }


lldpV2Xdot3LocPowerPairs OBJECT-TYPE

SYNTAX INTEGER { signal(0), spare(1) }  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"This attribute identifies the PSE Pinout Alternative (see IEEE Std 802.3, 33.2.3 and 145.2.4) in use for detecting and supplying power to the PD.  
A Type 3 or Type 4 PSE detecting<sup>\*</sup> or supplying power on both PSE Pinout Alternatives may return either PSE Pinout Alternative as this configuration is communicated through the aLldpXdot3LocPowerPairsExt attribute.  
A Type 3 or Type 4 PSE supplying power on only one PSE Pinout Alternative returns that PSE Pinout Alternative.  
For a PD, the contents of this attribute are undefined."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.9"  
 ::= { lldpV2Xdot3LocPowerEntry 5 }

lldpV2Xdot3LocPowerClass OBJECT-TYPE

SYNTAX INTEGER { class0(0), class1(1), class2(2), class3(3), class4(4) }  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"This attribute identifies the requested Class of the PD as specified  
in IEEE Std 802.3, 33.2.6 and 145.2.8."



 This attribute returns an enumeration of 'class4' for a PD of Class 4

or higher as such PD Classes are identified through the aLldpXdot3LocPowerClassExt attribute."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.10"

::= { lldpV2Xdot3LocPowerEntry 6 }

lldpV2Xdot3LocPowerType OBJECT-TYPE

SYNTAX BITS { type1p(0), pdpse(1) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute that returns a bit string indicating whether the local system is a PSE or a PD and whether it is Type 1 or greater than Type 1. The first bit ('type1') indicates Type 1 or greater than Type 1.

The second bit ('pdpse') indicates PSE or PD."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.14"

::= { lldpV2Xdot3LocPowerEntry 7 }

lldpV2Xdot3LocPowerSource OBJECT-TYPE

SYNTAX INTEGER { pseprimary(0), psebackup(1), pseunknown(2), pdpseandlocal(3), pdpseonly(4), pdunknown(5) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A GET returns an integer indicating the power sources of the local system. A PSE indicates whether it is being powered by a primary power source; a backup power source; or unknown. A PD indicates whether it is being powered by a PSE and locally; by a PSE only; or unknown."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.15"

::= { lldpV2Xdot3LocPowerEntry 8 }

lldpV2Xdot3LocPowerPriority OBJECT-TYPE

SYNTAX INTEGER { low(0), high(1), critical(2), unknown(3) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"A GET returns the priority of a PD system. For a PSE, this is the priority that the PSE assigns to the PD. For a PD, this is the priority that the PD requests from the PSE. A SET operation changes the priority of the PD system to the indicated value."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.16"

::= { lldpV2Xdot3LocPowerEntry 9 }

lldpV2Xdot3LocPDRequestedPowerValue OBJECT-TYPE

SYNTAX Integer32

UNITS "0.1 Watts"

MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"A GET returns the PD requested power value.  
For a PD, it is the power value that the PD has currently requested from the remote system. PD requested power value is the maximum input average power the PD ever draws under this power allocation if accepted. For a PSE, it is the power value that the PSE echoes back to the remote system. This is the PD requested power value that was used by the PSE to compute the power it has currently allocated to the remote system."

REFERENCE  
"IEEE Std 802.3, 30.12.2.1.17"  
 ::= { lldpV2Xdot3LocPowerEntry 10 }

lldpV2Xdot3LocPDRequestedPowerValueA OBJECT-TYPE

SYNTAX Integer32  
UNITS "0.1 Watts"  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A GET returns the PD requested power value for the Mode A pairset.  
For a PD, it is the power value that the PD has currently requested from the remote system for the Mode A pairset. For a PSE, it is the power value for the Alternative A pairset that the PSE echoes back to the remote system."

REFERENCE  
"IEEE Std 802.3, 30.12.2.1.18"  
 ::= { lldpV2Xdot3LocPowerEntry 11 }

lldpV2Xdot3LocPDRequestedPowerValueB OBJECT-TYPE

SYNTAX Integer32  
UNITS "0.1 Watts"  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A GET returns the PD requested power value for the Mode B pairset.  
For a PD, it is the power value that the PD has currently requested from the remote system for the Mode B pairset. For a PSE, it is the power value for the Alternative B pairset that the PSE echoes back to the remote system."

REFERENCE  
"IEEE Std 802.3, 30.12.2.1.19"  
 ::= { lldpV2Xdot3LocPowerEntry 12 }

lldpV2Xdot3LocPSEAllocatedPowerValue OBJECT-TYPE

SYNTAX Integer32  
UNITS "0.1 Watts"  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A GET returns the PSE allocated power value."

For a PSE, it is the power value that the PSE has currently allocated to the remote system. The PSE allocated power value is the maximum input average power that the PSE wants the PD to ever draw under this allocation if it is accepted. For a PD, it is the power value that the PD echoes back to the remote system. This is the PSE allocated power value that was used by the PD to compute the power that it has currently requested from the remote system."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.20"  
 ::= { lldpV2Xdot3LocPowerEntry 13 }

lldpV2Xdot3LocPSEAllocatedPowerValueA OBJECT-TYPE

SYNTAX Integer32  
 UNITS "0.1 Watts"  
 MAX-ACCESS read-only  
 STATUS current  
 DESCRIPTION

"A GET returns the PSE allocated power value for the Alternative A pairset.  
 For a PSE, it is the power value for the Alternative A pairset that the PSE has currently allocated to the remote system.  
 For a PD, it is the power value for the Mode A pairset that the PD echoes back to the remote system."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.21"  
 ::= { lldpV2Xdot3LocPowerEntry 14 }

lldpV2Xdot3LocPSEAllocatedPowerValueB OBJECT-TYPE

SYNTAX Integer32  
 UNITS "0.1 Watts"  
 MAX-ACCESS read-only  
 STATUS current  
 DESCRIPTION

"A GET returns the PSE allocated power value for the Alternative B pairset.  
 For a PSE, it is the power value for the Alternative B pairset that the PSE has currently allocated to the remote system.  
 For a PD, it is the power value for the Mode B pairset that the PD echoes back to the remote system."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.22"  
 ::= { lldpV2Xdot3LocPowerEntry 15 }

lldpV2Xdot3LocPSEPoweringStatus OBJECT-TYPE

SYNTAX INTEGER { fourPairDualSigPD(0), fourPairSingleSigPD(1), twoPair(2) }  
 MAX-ACCESS read-only  
 STATUS current  
 DESCRIPTION

"This attribute indicates the powering status of the PSE.  
 For a PD, the contents of this attribute are undefined."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.23"

```

 ::= { lldpV2Xdot3LocPowerEntry 16 }

lldpV2Xdot3LocPDPoweredStatus OBJECT-TYPE
    SYNTAX      INTEGER { fourPairDualSigPD(0), twoPairDualSigPD(1),
                          singleSigPD(2) }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the powering status of the PD.
         For a PSE, the contents of this attribute are undefined."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.24"
 ::= { lldpV2Xdot3LocPowerEntry 17 }

lldpV2Xdot3LocPowerPairsExt OBJECT-TYPE
    SYNTAX      INTEGER { altA(0), altB(1), both(2) }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute identifies the supported PSE Pinout Alternatives
         for a PSE.
         For a PD, the contents of this attribute are undefined."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.25"
 ::= { lldpV2Xdot3LocPowerEntry 18 }

lldpV2Xdot3LocPowerClassExtA OBJECT-TYPE
    SYNTAX      INTEGER { singlesig(0), class1(1), class2(2), class3(3),
                          class4(4), class5(5) }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "For a dual-signature PD, this attribute indicates the
         requested Class for Mode A during Physical Layer Classification
         (see IEEE Std 802.3, 145.3.6).
         For a single-signature PD, this attribute is set to 'singlesig'.
         For a PSE connected to a dual-signature PD, this attribute
         indicates the currently assigned Class for Mode A
         (see IEEE Std 802.3, 145.2.8).
         For a PSE connected to a single-signature PD or a PSE that
operates
         only in 2-pair mode, this attribute is set to 'singlesig'."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.26"
 ::= { lldpV2Xdot3LocPowerEntry 19 }

lldpV2Xdot3LocPowerClassExtB OBJECT-TYPE
    SYNTAX      INTEGER { singlesig(0), class1(1), class2(2), class3(3),
                          class4(4), class5(5) }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "For a dual-signature PD, this attribute indicates the
         requested Class for Mode B during Physical Layer Classification

```

(see IEEE Std 802.3, 145.3.6).  
For a single-signature PD, this attribute is set to 'singlesig'.  
For a PSE connected to a dual-signature PD, this attribute  
indicates the currently assigned Class for Mode B  
(see IEEE Std 802.3, 145.2.8).  
For a PSE connected to a single-signature PD or a PSE that

operates

only in 2-pair mode, this attribute is set to 'singlesig'."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.27"

::= { lldpV2Xdot3LocPowerEntry 20 }

lldpV2Xdot3LocPowerClassExt OBJECT-TYPE

SYNTAX INTEGER { dualsig(0), class1(1), class2(2), class3(3),  
class4(4), class5(5), class6(6), class7(7),  
class8(8) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"For a single-signature PD, this attribute indicates the  
requested Class during Physical Layer Classification  
(see IEEE Std 802.3, 145.3.6).

For a dual-signature PD, this attribute is set to 'dualsig'.

For a PSE connected to a single-signature PD or a PSE that  
operates only in 2-pair mode, this attribute indicates the  
currently assigned Class (see IEEE Std 802.3, 145.2.8).

For a PSE connected to a dual-signature PD, this attribute is  
set to 'dualsig'."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.28"

::= { lldpV2Xdot3LocPowerEntry 21 }

lldpV2Xdot3LocPowerTypeExt OBJECT-TYPE

SYNTAX INTEGER { type4dualSigPD(0), type4singleSigPD(1),  
type3dualSigPD(2), type3singleSigPD(3), type4PSE(4),  
type3PSE(5) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicate if the local system is a Type 3 or Type

4

PSE or PD and, in the case of a Type 3 or Type 4 PD, if it is a  
single-signature PD or a dual-signature PD."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.29"

::= { lldpV2Xdot3LocPowerEntry 22 }

lldpV2Xdot3LocPDLoad OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"For a dual-signature PD, this attribute indicates whether the  
load of a dual-signature PD is electrically isolated, as defined

in IEEE Std 802.3, 79.3.2.10.2.

For a single-signature PD or a PSE, the value of this attribute is FALSE."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.30"

::= { lldpV2Xdot3LocPowerEntry 23 }

lldpV2Xdot3LocPD4PID OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the local PD supports powering of both PD Modes."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.31"

::= { lldpV2Xdot3LocPowerEntry 24 }

lldpV2Xdot3LocPSEMaxAvailPower OBJECT-TYPE

SYNTAX Integer32

UNITS "0.1 Watts"

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute reports the local PSE maximum available power."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.32"

::= { lldpV2Xdot3LocPowerEntry 25 }

lldpV2Xdot3LocPSEAutoclassSupport OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the local PSE supports Autoclass."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.33"

::= { lldpV2Xdot3LocPowerEntry 26 }

lldpV2Xdot3LocPSEAutoclassCompleted OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the local PSE has completed the Autoclass measurement."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.34"


::= { lldpV2Xdot3LocPowerEntry 27 }


lldpV2Xdot3LocPSEAutoclassRequest OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only


```

STATUS      current
DESCRIPTION
    "This attribute indicates whether the local PSE  is
    requesting an Autoclass measurement and power budget
    adjustment."
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.35"
 ::= { lldpV2Xdot3LocPowerEntry 28 }

lldpV2Xdot3LocPowerDownRequest OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "This attribute indicates the local PD  is requesting
    a power down when the value is 0x1D."
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.36"
 ::= { lldpV2Xdot3LocPowerEntry 29 }

lldpV2Xdot3LocPowerDownTime OBJECT-TYPE
SYNTAX      Integer32
UNITS       "Seconds"
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "This attribute indicates the time the PD requests
    to stay powered off. A value of zero indicates an
    indefinite amount of time."
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.37"
 ::= { lldpV2Xdot3LocPowerEntry 30 }

lldpV2Xdot3LocMeasVoltageSupport OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the local device is capable of
    providing a voltage measurement. "
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.38"
 ::= { lldpV2Xdot3LocPowerEntry 31 }

lldpV2Xdot3LocMeasCurrentSupport OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the local device is capable of
    providing a current measurement. "
REFERENCE
    
    "IEEE Std 802.3, 30.12.2.1.39"
 ::= { lldpV2Xdot3LocPowerEntry 32 }

```

```

lldpV2Xdot3LocMeasPowerSupport OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the local device is capable of
        providing a power measurement."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.40"
    ::= { lldpV2Xdot3LocPowerEntry 33 }

lldpV2Xdot3LocMeasEnergySupport OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the local device is capable of
        providing an energy measurement."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.41"
    ::= { lldpV2Xdot3LocPowerEntry 34 }

lldpV2Xdot3LocMeasurementSource OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This attribute indicates to local device on which Alternative
        or Mode the measurement is to be taken."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.42"
    ::= { lldpV2Xdot3LocPowerEntry 35 }

lldpV2Xdot3LocMeasVoltageRequest OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the local device is requesting
        a voltage measurement from the remote device."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.43"
    ::= { lldpV2Xdot3LocPowerEntry 36 }

lldpV2Xdot3LocMeasCurrentRequest OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the local device is requesting
        a current measurement from the remote device."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.44"

```



```
::= { lldpV2Xdot3LocPowerEntry 37 }
```

```
lldpV2Xdot3LocMeasPowerRequest OBJECT-TYPE
```

```
SYNTAX      TruthValue
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
    "This attribute indicates the local device is requesting  
    a power measurement from the remote device."
```

```
REFERENCE
```

```
    "IEEE Std 802.3, 30.12.2.1.45"
```

```
::= { lldpV2Xdot3LocPowerEntry 38 }
```

```
lldpV2Xdot3LocMeasEnergyRequest OBJECT-TYPE
```

```
SYNTAX      TruthValue
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
    "This attribute indicates the local device is requesting  
    energy measurement from the remote device."
```

```
REFERENCE
```

```
    "IEEE Std 802.3, 30.12.2.1.46"
```

```
::= { lldpV2Xdot3LocPowerEntry 39 }
```


```
lldpV2Xdot3LocMeasVoltageValid OBJECT-TYPE
```

```
SYNTAX      TruthValue
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
    "This attribute indicates the local device's voltage measurement  
    is valid." 
```

```
REFERENCE
```

```
    "IEEE Std 802.3, 30.12.2.1.47"
```

```
::= { lldpV2Xdot3LocPowerEntry 40 }
```

```
lldpV2Xdot3LocMeasCurrentValid OBJECT-TYPE
```

```
SYNTAX      TruthValue
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
    "This attribute indicates the local device's current measurement  
    is valid."
```

```
REFERENCE
```

```
    "IEEE Std 802.3, 30.12.2.1.48"
```

```
::= { lldpV2Xdot3LocPowerEntry 41 }
```



```
lldpV2Xdot3LocMeasPowerValid OBJECT-TYPE
```

```
SYNTAX      TruthValue
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
     "This attribute indicates the local device's power measurement  
    is valid." 
```

```
REFERENCE
```

```
    "IEEE Std 802.3, 30.12.2.1.49"  
 ::= { lldpV2Xdot3LocPowerEntry 42 }
```

lldpV2Xdot3LocMeasEnergyValid OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the local device's energy measurement is valid."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.50"

```
 ::= { lldpV2Xdot3LocPowerEntry 43 }
```

lldpV2Xdot3LocMeasVoltageUncertainty OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the expanded uncertainty (coverage factor  $k = 2$ ) for the device's voltage measurement. See IEEE Std 802.3, Table 79-21."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.51"

```
 ::= { lldpV2Xdot3LocPowerEntry 44 }
```

lldpV2Xdot3LocMeasCurrentUncertainty OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the expanded uncertainty (coverage factor  $k = 2$ ) for the device's current measurement. See IEEE Std 802.3, Table 79-21."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.52"

```
 ::= { lldpV2Xdot3LocPowerEntry 45 }
```

lldpV2Xdot3LocMeasPowerUncertainty OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the expanded uncertainty (coverage factor  $k = 2$ ) for the device's power measurement. See IEEE Std 802.3, Table 79-21."

REFERENCE


"IEEE Std 802.3, 30.12.2.1.53"

```
 ::= { lldpV2Xdot3LocPowerEntry 46 }
```

lldpV2Xdot3LocMeasEnergyUncertainty OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current 

#### DESCRIPTION

"This attribute indicates the expanded uncertainty (coverage factor  $k = 2$ ) for the device's energy measurement. See IEEE Std 802.3, Table 79-21."

#### REFERENCE

"IEEE Std 802.3, 30.12.2.1.54"

::= { lldpV2Xdot3LocPowerEntry 47 }

#### lldpV2Xdot3LocVoltageMeasurement OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

#### DESCRIPTION

"This attribute indicates the measured device voltage. See IEEE Std 802.3, Table 79-21."

#### REFERENCE

"IEEE Std 802.3, 30.12.2.1.55"

::= { lldpV2Xdot3LocPowerEntry 48 }

#### lldpV2Xdot3LocCurrentMeasurement OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

#### DESCRIPTION

"This attribute indicates the measured device current. See IEEE Std 802.3, Table 79-21."

#### REFERENCE

"IEEE Std 802.3, 30.12.2.1.56"

::= { lldpV2Xdot3LocPowerEntry 49 }

#### lldpV2Xdot3LocPowerMeasurement OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

#### DESCRIPTION

"This attribute indicates the measured device power. See IEEE Std 802.3, Table 79-21."

#### REFERENCE

"IEEE Std 802.3, 30.12.2.1.57"

::= { lldpV2Xdot3LocPowerEntry 50 }

#### lldpV2Xdot3LocEnergyMeasurement OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

#### DESCRIPTION

"This attribute indicates the measured device energy. See IEEE Std 802.3, Table 79-21."

#### REFERENCE

"IEEE Std 802.3, 30.12.2.1.58"


::= { lldpV2Xdot3LocPowerEntry 51 }

#### lldpV2Xdot3LocPSEPowerPriceIndex OBJECT-TYPE


SYNTAX Integer32

```
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This attribute indicates an index of the price of power being
    sourced by the PSE. For a PD, this value is undefined."
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.59"
 ::= { lldpV2Xdot3LocPowerEntry 52 }
```

```
lldpV2Xdot3LocResponseTime OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "A GET returns the response time in seconds of the local system.
    For a PD, it is the maximum time required to update the value of
    lldpV2Xdot3LocPDRequestedPowerValue when the remote system
    requests the PD to change its max power draw. For a PSE, it is
    the maximum time required to update the value of
    lldpV2Xdot3LocPDRequestedPowerValue when the remote system
    requests of the PSE a new power value."
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.60"
 ::= { lldpV2Xdot3LocPowerEntry 53 }
```

```
lldpV2Xdot3LocReady OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "The truth value used to identify whether the local Data Link
    Layer  classification engine has completed initialization and is ready
    to receive and transmit LLDPDUs."
REFERENCE
    "IEEE Std 802.3, 30.12.2.1.61"
 ::= { lldpV2Xdot3LocPowerEntry 54 }
```

```
lldpV2Xdot3LocMaxFrameSizeTable OBJECT-TYPE
SYNTAX SEQUENCE OF LldpV2Xdot3LocMaxFrameSizeEntry
MAX-ACCESS not-accessible
STATUS current
DESCRIPTION
    "This table contains one row per port of maximum frame
    size information (as a part of the LLDP IEEE 802.3
    organizational extension) on the local system known to this agent."
 ::= { lldpV2Xdot3LocalData 3 }
```

```
lldpV2Xdot3LocMaxFrameSizeEntry OBJECT-TYPE
SYNTAX LldpV2Xdot3LocMaxFrameSizeEntry
MAX-ACCESS not-accessible
STATUS current 
```

#### DESCRIPTION

"Maximum Frame Size information about a particular port component."

```
INDEX      { lldpV2LocPortIfIndex }
 ::= { lldpV2Xdot3LocMaxFrameSizeTable 1 }
```

```
LldpV2Xdot3LocMaxFrameSizeEntry ::= SEQUENCE {
    lldpV2Xdot3LocMaxFrameSize  Unsigned32
}
```

lldpV2Xdot3LocMaxFrameSize OBJECT-TYPE

SYNTAX Unsigned32 (0..65535)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"An integer value indicating the maximum supported frame size in octets on the given port of the local system."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.13"

```
 ::= { lldpV2Xdot3LocMaxFrameSizeEntry 1 }
```

lldpV2Xdot3LocEEETable OBJECT-TYPE

SYNTAX SEQUENCE OF LldpV2Xdot3LocEEEEEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This table contains one row per port of Energy Efficient Ethernet

information (as a part of the LLDP IEEE 802.3 organizational extension) on the local system known to this agent."

```
 ::= { lldpV2Xdot3LocalData 4 }
```

lldpV2Xdot3LocEEEEEntry OBJECT-TYPE

SYNTAX LldpV2Xdot3LocEEEEEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Information about a particular port component."

```
INDEX      { lldpV2LocPortIfIndex }
```

```
 ::= { lldpV2Xdot3LocEEETable 1 }
```

```
LldpV2Xdot3LocEEEEEntry ::= SEQUENCE {
```

```
    lldpV2Xdot3LocTxTwSys          Integer32,
    lldpV2Xdot3LocTxTwSysEcho      Integer32,
    lldpV2Xdot3LocRxTwSys          Integer32,
    lldpV2Xdot3LocRxTwSysEcho      Integer32,
    lldpV2Xdot3LocFbTwSys          Integer32,
    lldpV2Xdot3TxDllReady          TruthValue,
    lldpV2Xdot3RxDllReady          TruthValue,
    lldpV2Xdot3LocDllEnabled       TruthValue,
    lldpV2Xdot3LocTxFw             TruthValue,
    lldpV2Xdot3LocTxFwEcho         TruthValue,
    lldpV2Xdot3LocRxFw             TruthValue,
    lldpV2Xdot3LocRxFwEcho         TruthValue,
```

```

lldpV2Xdot3LocPreemptSupported TruthValue,
lldpV2Xdot3LocPreemptEnabled   TruthValue,
lldpV2Xdot3LocPreemptActive    TruthValue,
lldpV2Xdot3LocAddFragSize      Integer32
}

lldpV2Xdot3LocTxTwSys OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        * "A GET returns the value of Tw_sys_tx that the local system
          can support in the transmit direction.
          This object maps to the variable LocTxSystemValue as defined
          in IEEE Std 802.3, 78.4.2.3."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.62"
        ::= { lldpV2Xdot3LocEEEEEntry 1 }

lldpV2Xdot3LocTxTwSysEcho OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A GET returns the value of Tw_sys_tx that the remote system is
        advertising that it can support in the transmit direction and is
        echoed by the local system under the control of the EEE DLL
receiver
        state diagram. This object maps to the variable
        LocTxSystemValueEcho as defined in IEEE Std 802.3, 78.4.2.3"
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.63"
        ::= { lldpV2Xdot3LocEEEEEntry 2 }

lldpV2Xdot3LocRxTwSys OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A GET returns the value of Tw_sys_tx that
        the local system is requesting in the receive direction.
        This object maps to the variable LocRxSystemValue as
        defined in IEEE Std 802.3, 78.4.2.3."
    REFERENCE
        "IEEE Std 802.3, 30.12.2.1.64"
        ::= { lldpV2Xdot3LocEEEEEntry 3 }

lldpV2Xdot3LocRxTwSysEcho OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A GET returns the value of Tw_sys_tx that
        the remote system is advertising that it is requesting in the

```

receive direction and is echoed by the local system under the control of the EEE DLL transmitter state diagram. This object maps to the variable LocRxSystemValueEcho as defined in IEEE Std 802.3 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.65"  
 ::= { lldpV2Xdot3LocEEEEEntry 4 }

lldpV2Xdot3LocFbTwSys OBJECT-TYPE

SYNTAX Integer32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A GET returns the value of the fallback Tw\_sys\_tx that the local system is advertising to the remote system. This object maps to the variable LocFbSystemValue as defined in IEEE Std 802.3 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.66"  
 ::= { lldpV2Xdot3LocEEEEEntry 5 }

lldpV2Xdot3TxDllReady OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"The truth value used to identify whether the local Data Link Layer EEE layer management function has completed initialization and is ready to receive and transmit LLDPDUs."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.67"  
 ::= { lldpV2Xdot3LocEEEEEntry 6 }

lldpV2Xdot3RxDllReady OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"The truth value used to identify whether the local Data Link Layer EEE layer management function has completed initialization and is ready to receive and transmit LLDPDUs."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.68"  
 ::= { lldpV2Xdot3LocEEEEEntry 7 }

lldpV2Xdot3LocDllEnabled OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"The truth value used to identify whether the local system has completed auto-negotiation with a link partner that has

indicated at least one EEE capability."

✖ REFERENCE

"IEEE Std 802.3, 30.12.2.1.69"  
 ::= { lldpV2Xdot3LocEEEEEntry 8 }

lldpV2Xdot3LocTxFw OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This value identifies the LPI\_FW value that the local system can support in the transmit direction. This attribute maps to variable LocTxSystemFW as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.70"  
 ::= { lldpV2Xdot3LocEEEEEntry 9 }

lldpV2Xdot3LocTxFwEcho OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This value identifies the LPI\_FW value advertised by the remote system and echoed by the local system. This attribute maps to variable LocTxSystemFWEcho as defined in IEEE Std 802.3,

78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.71"  
 ::= { lldpV2Xdot3LocEEEEEntry 10 }

lldpV2Xdot3LocRxFw OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This value identifies the LPI\_FW value that the local system is requesting in the receive direction. This attribute maps to variable LocRxSystemFW as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.72"  
 ::= { lldpV2Xdot3LocEEEEEntry 11 }

lldpV2Xdot3LocRxFwEcho OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This value identifies the LPI\_FW value requested by the remote system and echoed by the local system. This attribute maps to variable LocRxSystemFWEcho as defined in IEEE Std 802.3,


78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.2.1.73"  
 ::= { lldpV2Xdot3LocEEEEEntry 12 }



#### lldpV2Xdot3LocPreemptSupported OBJECT-TYPE

 SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The truth value used to identify whether the local system supports the preemption capability."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.74"  
 ::= { lldpV2Xdot3LocEEEEEntry 13 }

#### lldpV2Xdot3LocPreemptEnabled OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The truth value used to identify whether the preemption capability is enabled on the local system."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.75"  
 ::= { lldpV2Xdot3LocEEEEEntry 14 }

#### lldpV2Xdot3LocPreemptActive OBJECT-TYPE

SYNTAX TruthValue  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"The truth value used to identify whether the preemption capability is active on the local system."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.76"  
 ::= { lldpV2Xdot3LocEEEEEntry 15 }

#### lldpV2Xdot3LocAddFragSize OBJECT-TYPE

SYNTAX Integer32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"This value indicates the minimum size of non-final fragments supported by the local system. This value is expressed in units of 64 octets of additional fragment length."  
REFERENCE  
"IEEE Std 802.3, 30.12.2.1.77"  
 ::= { lldpV2Xdot3LocEEEEEntry 16 }

#### lldpV2Xdot3RemoteData OBJECT IDENTIFIER

::= { lldpV2Xdot3Objects 3 }

#### lldpV2Xdot3RemPortTable OBJECT-TYPE

SYNTAX SEQUENCE OF LldpV2Xdot3RemPortEntry  
MAX-ACCESS not-accessible  
STATUS current

DESCRIPTION

"This table contains Ethernet port information (as a part of the LLDP IEEE 802.3 organizational extension) of the remote system."

::= { lldpV2Xdot3RemoteData 1 }

lldpV2Xdot3RemPortEntry OBJECT-TYPE

SYNTAX LldpV2Xdot3RemPortEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Information about a particular physical network connection."

INDEX { lldpV2RemTimeMark, lldpV2RemLocalIfIndex,  
lldpV2RemLocalDestMACAddress, lldpV2RemIndex }

::= { lldpV2Xdot3RemPortTable 1 }

LldpV2Xdot3RemPortEntry ::= SEQUENCE {

lldpV2Xdot3RemPortAutoNegSupported TruthValue,

lldpV2Xdot3RemPortAutoNegEnabled TruthValue,

lldpV2Xdot3RemPortAutoNegAdvertisedCap OCTET STRING,

lldpV2Xdot3RemPortOperMauType Unsigned32

}

lldpV2Xdot3RemPortAutoNegSupported OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The truth value used to indicate whether the given port (associated with remote system) supports Auto-negotiation."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.1"

::= { lldpV2Xdot3RemPortEntry 1 }

lldpV2Xdot3RemPortAutoNegEnabled OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The truth value used to indicate whether port Auto-negotiation is enabled on the given port associated with the remote system."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.2"

::= { lldpV2Xdot3RemPortEntry 2 }

lldpV2Xdot3RemPortAutoNegAdvertisedCap OBJECT-TYPE

SYNTAX OCTET STRING (SIZE(2))

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This object contains the value (bitmap) of the ifMauAutoNegCapAdvertisedBits object (defined in IETF RFC 3636) which is associated with the given port on the

```

        remote system."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.3"
        ::= { lldpV2Xdot3RemPortEntry 3 }

lldpV2Xdot3RemPortOperMauType OBJECT-TYPE
    SYNTAX      Unsigned32 (0..2147483647)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "An integer value that indicates the operational MAU type
        of the sending device.

        This object contains the integer value derived from the
        list position of the corresponding dot3MauType as listed in
        in Clause 13 and is equal to the last number in
        the respective dot3MauType OID.

        For example, if the ifMauType object is dot3MauType1000BaseTHD
        which corresponds to {dot3MauType 29}, the numerical value of
        this field is 29. For MAU types not listed in Clause 13,
        the value of this field shall be set to zero."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.4"
        ::= { lldpV2Xdot3RemPortEntry 4 }

lldpV2Xdot3RemPowerTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot3RemPowerEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table contains Ethernet power information (as a part
        of the LLDP IEEE 802.3 organizational extension) of the remote
        system."
        ::= { lldpV2Xdot3RemoteData 2 }

lldpV2Xdot3RemPowerEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot3RemPowerEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Information about a particular physical network connection."
    INDEX      { lldpV2RemTimeMark, lldpV2RemLocalIfIndex,
                lldpV2RemLocalDestMACAddress, lldpV2RemIndex }
        ::= { lldpV2Xdot3RemPowerTable 1 }

LldpV2Xdot3RemPowerEntry ::= SEQUENCE {
    lldpV2Xdot3RemPowerPortClass      LldpV2PowerPortClass,
    lldpV2Xdot3RemPowerMDISupported   TruthValue,
    lldpV2Xdot3RemPowerMDIEnabled     TruthValue,
    lldpV2Xdot3RemPowerPairControlable TruthValue,
    lldpV2Xdot3RemPowerPairs          BITS,
    lldpV2Xdot3RemPowerClass          INTEGER,
    lldpV2Xdot3RemPowerType           BITS,

```

```

lldpV2Xdot3RemPowerSource          INTEGER,
lldpV2Xdot3RemPowerPriority          INTEGER,
lldpV2Xdot3RemPDRequestedPowerValue Integer32,
lldpV2Xdot3RemPDRequestedPowerValueA Integer32,
lldpV2Xdot3RemPDRequestedPowerValueB Integer32,
lldpV2Xdot3RemPSEAllocatedPowerValue Integer32,
lldpV2Xdot3RemPSEAllocatedPowerValueA Integer32,
lldpV2Xdot3RemPSEAllocatedPowerValueB Integer32,
lldpV2Xdot3RemPSEPoweringStatus     INTEGER,
lldpV2Xdot3RemPDPoweredStatus        INTEGER,
lldpV2Xdot3RemPowerPairsExt          INTEGER,
lldpV2Xdot3RemPowerClassExtA         INTEGER,
lldpV2Xdot3RemPowerClassExtB        INTEGER,
lldpV2Xdot3RemPowerClassExt          INTEGER,
lldpV2Xdot3RemPowerTypeExt           INTEGER,
lldpV2Xdot3RemPDLoad                  TruthValue,
lldpV2Xdot3RemPD4PID                  TruthValue,
lldpV2Xdot3RemPSEMaxAvailPower        Integer32,
lldpV2Xdot3RemPSEAutoclassSupport     TruthValue,
lldpV2Xdot3RemPSEAutoclassCompleted   TruthValue,
lldpV2Xdot3RemPSEAutoclassRequest     TruthValue,
lldpV2Xdot3RemPowerDownRequest        Integer32,
lldpV2Xdot3RemPowerDownTime           Integer32,
lldpV2Xdot3RemMeasVoltageSupport      TruthValue,
lldpV2Xdot3RemMeasCurrentSupport      TruthValue,
lldpV2Xdot3RemMeasPowerSupport        TruthValue,
lldpV2Xdot3RemMeasEnergySupport       TruthValue,
lldpV2Xdot3RemMeasurementSource       TruthValue,
lldpV2Xdot3RemMeasVoltageRequest      TruthValue,
lldpV2Xdot3RemMeasCurrentRequest      TruthValue,
lldpV2Xdot3RemMeasPowerRequest        TruthValue,
lldpV2Xdot3RemMeasEnergyRequest       TruthValue,
lldpV2Xdot3RemMeasVoltageValid        TruthValue,
lldpV2Xdot3RemMeasCurrentValid        TruthValue,
lldpV2Xdot3RemMeasPowerValid          TruthValue,
lldpV2Xdot3RemMeasEnergyValid         TruthValue,
lldpV2Xdot3RemMeasVoltageUncertainty  Integer32,
lldpV2Xdot3RemMeasCurrentUncertainty  Integer32,
lldpV2Xdot3RemMeasPowerUncertainty    Integer32,
lldpV2Xdot3RemMeasEnergyUncertainty   Integer32,
lldpV2Xdot3RemVoltageMeasurement      Integer32,
lldpV2Xdot3RemCurrentMeasurement      Integer32,
lldpV2Xdot3RemPowerMeasurement        Integer32,
lldpV2Xdot3RemEnergyMeasurement       Integer32,
lldpV2Xdot3RemPSEPowerPriceIndex     Integer32
}

```

lldpV2Xdot3RemPowerPortClass OBJECT-TYPE

SYNTAX LldpV2PowerPortClass

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The value that identifies the port Class of the given port associated with the remote system."

REFERENCE

```
"IEEE Std 802.3, 30.12.3.1.5"  
 ::= { lldpV2Xdot3RemPowerEntry 1 }
```

lldpV2Xdot3RemPowerMDISupported OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The truth value used to indicate whether the MDI power is supported on the given port associated with the remote system."

REFERENCE

```
"IEEE Std 802.3, 30.12.3.1.6"  
 ::= { lldpV2Xdot3RemPowerEntry 2 }
```

lldpV2Xdot3RemPowerMDIEnabled OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The truth value used to identify whether MDI power is enabled on the given port associated with the remote system."

REFERENCE

```
"IEEE Std 802.3, 30.12.3.1.7"  
 ::= { lldpV2Xdot3RemPowerEntry 3 }
```

lldpV2Xdot3RemPowerPairControlable OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the ability to control which PSE Pinout Alternative (see IEEE Std 802.3, 33.2.3 and 145.2.4) is used for PD detection and power on the given port on the remote system. For a PD, this attribute contains the value of the aPSEPowerPairsControlAbility attribute (see IEEE Std 802.3, 30.9.1.1.3) on the given port on the remote system. For a PSE, the contents of this attribute are undefined."

REFERENCE

```
"IEEE Std 802.3, 30.12.3.1.8"  
 ::= { lldpV2Xdot3RemPowerEntry 4 }
```

lldpV2Xdot3RemPowerPairs OBJECT-TYPE

SYNTAX BITS { signal(0), spare(1) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the supported PSE Pinout Alternative (see IEEE Std 802.3, 33.2.3 and 145.2.4) in use for supplying power to the PD on the given port on the remote system. For a

PD,

this attribute contains a value derived from the aPSEPowerPairs

attribute (see IEEE Std 802.3, 30.9.1.1.4) on the given port on the remote system.

For a PSE, the contents of this attribute are undefined. When

the 

remote system is a Type 3 or Type 4 PSE supplying power on both PSE Pinout Alternatives, the value of this attribute can

indicate

either pinout. If the aLldpXdot3RemPowerPairsExt attribute is available, it reports this configuration."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.9"  
 ::= { lldpV2Xdot3RemPowerEntry 5 }

lldpV2Xdot3RemPowerClass OBJECT-TYPE

SYNTAX INTEGER { class0(0), class1(1), class2(2), class3(3),  
 class4(4) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the requested Class of the PD as specified in IEEE Std 802.3, 33.2.6 and 145.2.8 on the given port on the remote system. This attribute returns an enumeration of 'class4' for a PD of Class 4 or higher as such PD Classes are identified through the aLldpXdot3RemPowerClassExt attribute."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.10"  
 ::= { lldpV2Xdot3RemPowerEntry 6 }

lldpV2Xdot3RemPowerType OBJECT-TYPE

SYNTAX BITS { typelp(0), pdpse(1) }

MAX-ACCESS read-only


STATUS current

DESCRIPTION

"This attribute that returns a bit string indicating whether the remote system is a PSE or a PD and whether it is Type 1 or greater than Type 1. The first bit ('typelp') indicates Type 1 or greater than Type 1.

The second bit ('pdpse') indicates PSE or PD."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.14"  
 ::= { lldpV2Xdot3RemPowerEntry 7 } 

lldpV2Xdot3RemPowerSource OBJECT-TYPE

SYNTAX INTEGER { pseprimary(0), psebackup(1), pseunknown(2),  
 pdpseandlocal(3), pdlocalonly(4), pdpseonly(5),  
 pdunknown(6) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A GET returns an integer indicating the power sources of the remote system. When the remote system is a PSE, it indicates whether it is being powered by a primary power source; a backup power source; or unknown. When the remote system is a PD, it indicates whether it is being powered by a PSE and locally;

locally only; by a PSE only; or unknown."

 REFERENCE

"IEEE Std 802.3, 30.12.3.1.15"  
 ::= { lldpV2Xdot3RemPowerEntry 8 }

lldpV2Xdot3RemPowerPriority OBJECT-TYPE

SYNTAX INTEGER { low(0), high(1), critical(2), unknown(3) }  
MAX-ACCESS read-write  
STATUS current  
DESCRIPTION

"A GET returns the priority of a PD system. For a PSE, this is the priority that the remote system requests. For a PD, this is the priority that the remote system has assigned."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.16"  
 ::= { lldpV2Xdot3RemPowerEntry 9 }

lldpV2Xdot3RemPDRequestedPowerValue OBJECT-TYPE

SYNTAX Integer32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A GET returns the PD requested power value that was used by the remote system to compute the power value that is has currently allocated to the PD. For a PSE, it is the PD requested power value received from the remote system. The definition and encoding of PD requested power value is the same as described in lldpV2Xdot3LocPDRequestedPowerValue."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.17"  
 ::= { lldpV2Xdot3RemPowerEntry 10 }

lldpV2Xdot3RemPDRequestedPowerValueA OBJECT-TYPE

SYNTAX Integer32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This attribute identifies the PD requested power value for the Mode A pairset that was used by the remote system to compute the power value that it has currently allocated to the PD. For a PSE, it is the PD requested power value for the Alternative A pairset received from the remote system. For a PD, it is the PD requested power value for the Alternative A pairset that the PSE echoes back to the remote system. The definition

and

encoding of PD requested power value for the Mode A pairset is the same as described in aLldpXdot3LocPDRequestedPowerValueA (see IEEE Std 802.3, 30.12.2.1.18)."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.18"  
 ::= { lldpV2Xdot3RemPowerEntry 11 }

lldpV2Xdot3RemPDRequestedPowerValueB OBJECT-TYPE

SYNTAX Integer32



MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the PD requested power value for the Mode B pairset that was used by the remote system to compute the power value that it has currently allocated to the PD. For a PSE, it is the PD requested power value for the Alternative B pairset received from the remote system. For a PD, it is the PD requested power value for the Alternative B pairset that the PSE echoes back to the remote system. The definition

and

encoding of PD requested power value for the Mode B pairset is the same as described in aLldpXdot3LocPDRequestedPowerValueB (see IEEE Std 802.3, 30.12.2.1.19)."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.19"

::= { lldpV2Xdot3RemPowerEntry 12 }

lldpV2Xdot3RemPSEAllocatedPowerValue OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the PSE allocated power value received from the remote system. For a PSE, it is the PSE allocated power value that was echoed back by the remote PD. For a PD, it is the PSE allocated power value received from the remote system. The definition and encoding of PSE allocated power value is the same as described in aLldpXdot3LocPSEAllocatedPowerValue (see IEEE Std 802.3, 30.12.2.1.20)."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.20"

::= { lldpV2Xdot3RemPowerEntry 13 }

lldpV2Xdot3RemPSEAllocatedPowerValueA OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the PSE allocated power value for the Alternative A pairset received from the remote system. For a

PSE,

it is the PSE allocated power value for the Alternative A

pairset

that was echoed back by the remote PD. For a PD, it is the PSE allocated power value for the Mode A pairset received from the remote system. The definition and encoding of PSE allocated

power

value for the Alternative A pairset is the same as described in aLldpXdot3LocPSEAllocatedPowerValueA (see IEEE Std 802.3, 30.12.2.1.21)."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.21"

::= { lldpV2Xdot3RemPowerEntry 14 }



lldpV2Xdot3RemPSEAllocatedPowerValueB OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the PSE allocated power value for the Alternative B pairset received from the remote system. For a PSE,

it is the PSE allocated power value for the Alternative B pairset

that was echoed back by the remote PD. For a PD, it is the PSE allocated power value for the Mode B pairset received from the remote system. The definition and encoding of PSE allocated

power value for the Alternative B pairset is the same as described in aLldpXdot3LocPSEAllocatedPowerValueB (see IEEE Std 802.3, 30.12.2.1.22)."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.22"  
 ::= { lldpV2Xdot3RemPowerEntry 15 }

lldpV2Xdot3RemPSEPoweringStatus OBJECT-TYPE

SYNTAX INTEGER { fourPairDualSigPD(0), fourPairSingleSigPD(1), twoPair(2) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the powering status of the remote PSE. For a PSE, the contents of this attribute are undefined."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.23"  
 ::= { lldpV2Xdot3RemPowerEntry 16 }

lldpV2Xdot3RemPDPoweredStatus OBJECT-TYPE

SYNTAX INTEGER { fourPairDualSigPD(0), twoPairDualSigPD(1), singleSigPD(2) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates the powering status of the remote PD. For a PD, the contents of this attribute are undefined."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.24"  
 ::= { lldpV2Xdot3RemPowerEntry 17 }

lldpV2Xdot3RemPowerPairsExt OBJECT-TYPE

SYNTAX INTEGER { altA(0), altB(1), both(2) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute identifies the supported PSE Pinout Alternative specified in IEEE Std 802.3, 145.2.4."

For a PD, this attribute contains the value of the aPSEPowerPairs attribute (see IEEE Std 802.3, 30.9.1.1.4) as sent by the remote PSE.

For a PSE, the contents of this attribute are undefined."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.25"  
 ::= { lldpV2Xdot3RemPowerEntry 18 }

lldpV2Xdot3RemPowerClassExtA OBJECT-TYPE

SYNTAX INTEGER { singlesig(0), class1(1), class2(2), class3(3),  
 class4(4), class5(5) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"For a dual-signature PD, this attribute indicates the currently assigned Class for Mode A by the remote 4-pair PSE.

For a single-signature PD or a dual-signature PD connected to a 2-pair only PSE, this attribute is set to 'singlesig' by the

remote

PSE.

For a PSE connected to a dual-signature PD, this attribute indicates

the requested Class for Mode A during Physical Layer classification

(see IEEE Std 802.3, 145.2.8) by the remote PD.

For a PSE connected to a single-signature PD, this attribute is set to

'singlesig' by the remote PD."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.26"  
 ::= { lldpV2Xdot3RemPowerEntry 19 }

lldpV2Xdot3RemPowerClassExtB OBJECT-TYPE

SYNTAX INTEGER { singlesig(0), class1(1), class2(2), class3(3),  
 class4(4), class5(5) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"For a dual-signature PD, this attribute indicates the currently assigned Class for Mode B by the remote 4-pair PSE.

For a single-signature PD or a dual-signature PD connected to a 2-pair only PSE, this attribute is set to 'singlesig' by the

remote

PSE.

For a PSE connected to a dual-signature PD, this attribute indicates

the requested Class for Mode B during Physical Layer classification

(see IEEE Std 802.3, 145.2.8) by the remote PD.

For a PSE connected to a single-signature PD, this attribute is set to

'singlesig' by the remote PD."

REFERENCE

```
"IEEE Std 802.3, 30.12.3.1.27"  
 ::= { lldpV2Xdot3RemPowerEntry 20 }
```

```
lldpV2Xdot3RemPowerClassExt OBJECT-TYPE
```

```
SYNTAX      INTEGER { dualsig(0), class1(1), class2(2), class3(3),  
                    class4(4), class5(5), class6(6), class7(7),  
                    class8(8) }
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"For a single-signature PD or a dual-signature PD connected to  
a 2-pair only PSE, this attribute indicates the currently  
assigned Class by the remote PSE.
```

```
For a dual-signature PD connected to a 4-pair capable PSE, this  
attribute is set to 'dualsig' by the remote PSE.
```

```
For a PSE connected to a single-signature PD, this attribute  
indicates the requested Class during Physical Layer
```

```
classification
```

```
(see IEEE Std 802.3, 145.2.8) by the remote PD.
```

```
For a PSE connected to a dual-signature PD, this attribute is
```

```
set to
```

```
'dualsig' by the remote PD."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.28"
```

```
 ::= { lldpV2Xdot3RemPowerEntry 21 }
```

```
lldpV2Xdot3RemPowerTypeExt OBJECT-TYPE
```

```
SYNTAX      INTEGER { type4dualSigPD(0), type4singleSigPD(1),  
                    type3dualSigPD(2), type3singleSigPD(3), type4PSE(4),  
                    type3PSE(5) }
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"This attribute indicate if the remote system is a Type 3 or Type
```

```
4
```

```
PSE or PD and, in the case of a Type 3 or Type 4 PD, if it is a  
single-signature PD or a dual-signature PD."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.29"
```

```
 ::= { lldpV2Xdot3RemPowerEntry 22 }
```

```
lldpV2Xdot3RemPDLload OBJECT-TYPE
```

```
SYNTAX      TruthValue
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"For a dual-signature PD, this attribute indicates whether the  
load of a dual-signature PD is electrically isolated, as defined  
in IEEE Std 802.3, 79.3.2.10.2.
```


```
For a PD, the value of this attribute is FALSE."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.30"
```

```
 ::= { lldpV2Xdot3RemPowerEntry 23 }
```

lldpV2Xdot3RemPD4PID OBJECT-TYPE

SYNTAX TruthValue 

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the remote PD system supports powering of both PD Modes."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.31"

::= { lldpV2Xdot3RemPowerEntry 24 }

lldpV2Xdot3RemPSEMaxAvailPower OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute reports the remote PSE maximum available power value in units of 0.1 W."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.32"

::= { lldpV2Xdot3RemPowerEntry 25 }

lldpV2Xdot3RemPSEAutoclassSupport OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the remote PSE system supports Autoclass."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.33"

::= { lldpV2Xdot3RemPowerEntry 26 }

lldpV2Xdot3RemPSEAutoclassCompleted OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the remote PSE system has completed the Autoclass measurement."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.34"

::= { lldpV2Xdot3RemPowerEntry 27 }

lldpV2Xdot3RemPSEAutoclassRequest OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This attribute indicates whether the remote PSE system is requesting an Autoclass measurement and power budget adjustment."

REFERENCE 

"IEEE Std 802.3, 30.12.3.1.35"

```
::= { lldpV2Xdot3RemPowerEntry 28 }
```

```
lldpV2Xdot3RemPowerDownRequest OBJECT-TYPE
```

```
SYNTAX Integer32
```

```
MAX-ACCESS read-write
```

```
STATUS current
```

```
DESCRIPTION
```

```
"This attribute indicates the remote PD system is requesting  
a power down when the value is 0x1D."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.36"
```

```
::= { lldpV2Xdot3RemPowerEntry 29 }
```

```
lldpV2Xdot3RemPowerDownTime OBJECT-TYPE
```

```
SYNTAX Integer32
```

```
MAX-ACCESS read-write
```

```
STATUS current
```

```
DESCRIPTION
```

```
"This attribute indicates the number of seconds the remote PD  
requests to stay powered off. A value of zero indicates an  
indefinite amount of time."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.37"
```

```
::= { lldpV2Xdot3RemPowerEntry 30 }
```

```
lldpV2Xdot3RemMeasVoltageSupport OBJECT-TYPE
```

```
SYNTAX TruthValue
```

```
MAX-ACCESS read-only
```

```
STATUS current
```

```
DESCRIPTION
```

```
"This attribute indicates the remote device is capable of  
providing a voltage measurement. "
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.38"
```

```
::= { lldpV2Xdot3RemPowerEntry 31 }
```

```
lldpV2Xdot3RemMeasCurrentSupport OBJECT-TYPE
```

```
SYNTAX TruthValue
```

```
MAX-ACCESS read-only
```

```
STATUS current
```

```
DESCRIPTION
```

```
"This attribute indicates the remote device is capable of  
providing a current measurement. "
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.12.3.1.39"
```

```
::= { lldpV2Xdot3RemPowerEntry 32 }
```

```
lldpV2Xdot3RemMeasPowerSupport OBJECT-TYPE
```

```
SYNTAX TruthValue
```

```
MAX-ACCESS read-only
```

```
STATUS current
```

```
DESCRIPTION
```

```
"This attribute indicates the remote device is capable of  
providing a power measurement."
```

```

REFERENCE
    "IEEE Std 802.3, 30.12.3.1.40"
 ::= { lldpV2Xdot3RemPowerEntry 33 }

lldpV2Xdot3RemMeasEnergySupport OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the remote device is capable of
         providing an energy measurement."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.41"
 ::= { lldpV2Xdot3RemPowerEntry 34 }

lldpV2Xdot3RemMeasurementSource OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This attribute indicates to remote device on which Alternative
         or Mode the measurement is to be taken."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.42"
 ::= { lldpV2Xdot3RemPowerEntry 35 }

lldpV2Xdot3RemMeasVoltageRequest OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the remote device is requesting
         a voltage measurement from the local device."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.43"
 ::= { lldpV2Xdot3RemPowerEntry 36 }

lldpV2Xdot3RemMeasCurrentRequest OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the remote device is requesting
         a current measurement from the local device."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.44"
 ::= { lldpV2Xdot3RemPowerEntry 37 }

lldpV2Xdot3RemMeasPowerRequest OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the remote device is requesting

```

```

        a power measurement from the local device."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.45"
 ::= { lldpV2Xdot3RemPowerEntry 38 }

lldpV2Xdot3RemMeasEnergyRequest OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the remote device is requesting
    energy measurement from the local device."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.46"
 ::= { lldpV2Xdot3RemPowerEntry 39 }

lldpV2Xdot3RemMeasVoltageValid OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the remote device's voltage measurement
    is valid."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.47"
 ::= { lldpV2Xdot3RemPowerEntry 40 }

lldpV2Xdot3RemMeasCurrentValid OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the remote device's current measurement
    is valid."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.48"
 ::= { lldpV2Xdot3RemPowerEntry 41 }

lldpV2Xdot3RemMeasPowerValid OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the remote device's power measurement
    is valid."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.49"
 ::= { lldpV2Xdot3RemPowerEntry 42 }

lldpV2Xdot3RemMeasEnergyValid OBJECT-TYPE
SYNTAX      TruthValue
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION

```

```

        "This attribute indicates the remote device's energy measurement
        is valid."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.50"
 ::= { lldpV2Xdot3RemPowerEntry 43 }

lldpV2Xdot3RemMeasVoltageUncertainty OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the expanded uncertainty
    (coverage factor k = 2) for the remote device's voltage
    measurement. See IEEE Std 802.3, Table 79-21."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.51"
 ::= { lldpV2Xdot3RemPowerEntry 44 }

lldpV2Xdot3RemMeasCurrentUncertainty OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the expanded uncertainty
    (coverage factor k = 2) for the remote device's current
    measurement. See IEEE Std 802.3, Table 79-21."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.52"
 ::= { lldpV2Xdot3RemPowerEntry 45 }

lldpV2Xdot3RemMeasPowerUncertainty OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the expanded uncertainty
    (coverage factor k = 2) for the remote device's power
    measurement. See IEEE Std 802.3, Table 79-21."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.53"
 ::= { lldpV2Xdot3RemPowerEntry 46 }

lldpV2Xdot3RemMeasEnergyUncertainty OBJECT-TYPE
SYNTAX      Integer32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This attribute indicates the expanded uncertainty
    (coverage factor k = 2) for the remote device's energy
    measurement. See IEEE Std 802.3, Table 79-21."
REFERENCE
    "IEEE Std 802.3, 30.12.3.1.54"
 ::= { lldpV2Xdot3RemPowerEntry 47 }

```



```

lldpV2Xdot3RemVoltageMeasurement OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the measured remote device voltage.
         See IEEE Std 802.3, Table 79-21."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.55"
    ::= { lldpV2Xdot3RemPowerEntry 48 }

lldpV2Xdot3RemCurrentMeasurement OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the measured remote device current.
         See IEEE Std 802.3, Table 79-21."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.56"
    ::= { lldpV2Xdot3RemPowerEntry 49 }

lldpV2Xdot3RemPowerMeasurement OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the measured remote device power.
         See IEEE Std 802.3, Table 79-21."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.57"
    ::= { lldpV2Xdot3RemPowerEntry 50 }

lldpV2Xdot3RemEnergyMeasurement OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates the measured remote device energy.
         See IEEE Std 802.3, Table 79-21."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.58"
    ::= { lldpV2Xdot3RemPowerEntry 51 }

lldpV2Xdot3RemPSEPowerPriceIndex OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This attribute indicates an index of the price of power being
         sourced by the remote PSE. For a PSE, this value is undefined."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.59"
    ::= { lldpV2Xdot3RemPowerEntry 52 }

```

```
lldpV2Xdot3RemMaxFrameSizeTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot3RemMaxFrameSizeEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table contains one row per port/destination
        address pair of maximum frame
        size information (as a part of the LLDP IEEE 802.3
        organizational extension) of the remote system."
    ::= { lldpV2Xdot3RemoteData 3 }
```

```
lldpV2Xdot3RemMaxFrameSizeEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot3RemMaxFrameSizeEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Maximum Frame Size information about a particular port
        component."
    INDEX      { lldpV2RemTimeMark, lldpV2RemLocalIfIndex,
                lldpV2RemLocalDestMACAddress, lldpV2RemIndex }
    ::= { lldpV2Xdot3RemMaxFrameSizeTable 1 }
```

```
LldpV2Xdot3RemMaxFrameSizeEntry ::= SEQUENCE {
    lldpV2Xdot3RemMaxFrameSize  Unsigned32
}
```

```
lldpV2Xdot3RemMaxFrameSize OBJECT-TYPE
    SYNTAX      Unsigned32 (0..65535)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "An integer value indicating the maximum supported frame
        size in octets on the port component associated with the
        remote system."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.13"
    ::= { lldpV2Xdot3RemMaxFrameSizeEntry 1 }
```

```
lldpV2Xdot3RemEEETable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot3RemEEEEEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This table contains one row per port of Energy Efficient
        Ethernet
        information (as a part of the LLDP IEEE 802.3 organizational
        extension) on the local system known to this agent."
    ::= { lldpV2Xdot3RemoteData 4 }
```

```
lldpV2Xdot3RemEEEEEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot3RemEEEEEntry
    MAX-ACCESS  not-accessible
    STATUS      current
```

DESCRIPTION

"Information about a particular port component."

INDEX { lldpV2RemLocalIfIndex }  
 ::= { lldpV2Xdot3RemEEETable 1 }

LldpV2Xdot3RemEEEEEntry ::= SEQUENCE {  
 lldpV2Xdot3RemTxTwSys Integer32,  
 lldpV2Xdot3RemTxTwSysEcho Integer32,  
 lldpV2Xdot3RemRxTwSys Integer32,  
 lldpV2Xdot3RemRxTwSysEcho Integer32,  
 lldpV2Xdot3RemFbTwSys Integer32,  
 lldpV2Xdot3RemTxFw TruthValue,  
 lldpV2Xdot3RemTxFwEcho TruthValue,  
 lldpV2Xdot3RemRxFw TruthValue,  
 lldpV2Xdot3RemRxFwEcho TruthValue,  
 lldpV2Xdot3RemPreemptSupported TruthValue,  
 lldpV2Xdot3RemPreemptEnabled TruthValue,  
 lldpV2Xdot3RemPreemptActive TruthValue,  
 lldpV2Xdot3RemAddFragSize Integer32  
 }

lldpV2Xdot3RemTxTwSys OBJECT-TYPE

SYNTAX Integer32  
 MAX-ACCESS read-only  
 STATUS current

DESCRIPTION

"A GET returns the value of Tw\_sys\_tx that the remote system can support in the transmit direction. This object maps to the variable RemTxSystemValue as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.60"

::= { lldpV2Xdot3RemEEEEEntry 1 }

lldpV2Xdot3RemTxTwSysEcho OBJECT-TYPE

SYNTAX Integer32  
 MAX-ACCESS read-only  
 STATUS current

DESCRIPTION

"A GET returns the value of Tw\_sys\_tx that the local system is advertising that it can support in the transmit direction as echoed by the remote system under the control of the EEE DLL

receiver

state diagram. This object maps to the variable RemTxSystemValueEcho as defined in IEEE Std 802.3, 78.4.2.3"

REFERENCE

"IEEE Std 802.3, 30.12.3.1.61"

::= { lldpV2Xdot3RemEEEEEntry 2 }

lldpV2Xdot3RemRxTwSys OBJECT-TYPE

SYNTAX Integer32  
 MAX-ACCESS read-only  
 STATUS current

DESCRIPTION

"A GET returns the value of Tw\_sys\_tx that the remote system is requesting in the receive direction. This object maps to the variable RemRxSystemValue as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.62"

::= { lldpV2Xdot3RemEEEEEntry 3 }

lldpV2Xdot3RemRxTwSysEcho OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A GET returns the value of Tw\_sys\_tx that the local system is advertising that it is requesting in the receive direction and is echoed by the remote system under the control of the EEE DLL transmitter state diagram. This object maps to the variable RemRxSystemValueEcho as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.63"

::= { lldpV2Xdot3RemEEEEEntry 4 }

lldpV2Xdot3RemFbTwSys OBJECT-TYPE

SYNTAX Integer32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A GET returns the value of the fallback Tw\_sys\_tx that the remote system is advertising. This object maps to the variable RemFbSystemValue as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.64"

::= { lldpV2Xdot3RemEEEEEntry 5 }

lldpV2Xdot3RemTxFw OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This value identifies the LPI\_FW value that the remote system can support in the transmit direction. This attribute maps to variable RemTxSystemFW as defined in IEEE Std 802.3, 78.4.2.3."

REFERENCE

"IEEE Std 802.3, 30.12.3.1.65"

::= { lldpV2Xdot3RemEEEEEntry 6 }

lldpV2Xdot3RemTxFwEcho OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This value identifies the LPI\_FW value advertised by the local

system and echoed by the remote system. This attribute maps to variable RemTxSystemFWEcho as defined in IEEE Std 802.3, 78.4.2.3."

```

REFERENCE
    "IEEE Std 802.3, 30.12.3.1.66"
::= { lldpV2Xdot3RemEEEEEntry 7 }

lldpV2Xdot3RemRxFw OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This value identifies the LPI_FW value that the remote system
        is requesting in the receive direction. This attribute maps to
        variable RemRxSystemFW as defined in IEEE Std 802.3, 78.4.2.3."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.67"
    ::= { lldpV2Xdot3RemEEEEEntry 8 }

lldpV2Xdot3RemRxFwEcho OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This value identifies the LPI_FW value requested by the local
        system and echoed by the remote system. This attribute maps to
        variable RemRxSystemFWEcho as defined in IEEE Std 802.3,
78.4.2.3."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.68"
    ::= { lldpV2Xdot3RemEEEEEntry 9 }

lldpV2Xdot3RemPreemptSupported OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The truth value used to identify whether the remote system
        supports the preemption capability."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.69"
    ::= { lldpV2Xdot3RemEEEEEntry 10 }

lldpV2Xdot3RemPreemptEnabled OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The truth value used to identify whether the preemption
        capability is enabled on the remote system."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.70"
    ::= { lldpV2Xdot3RemEEEEEntry 11 }

```

```

lldpV2Xdot3RemPreemptActive OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The truth value used to identify whether the preemption
         capability is active on the remote system."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.71"
    ::= { lldpV2Xdot3RemEEEEEntry 12 }

lldpV2Xdot3RemAddFragSize OBJECT-TYPE
    SYNTAX      Integer32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This value indicates the minimum size of non-final
         fragments supported by the remote system. This value
         is expressed in units of 64 octets of additional
         fragment length."
    REFERENCE
        "IEEE Std 802.3, 30.12.3.1.72"
    ::= { lldpV2Xdot3RemEEEEEntry 13 }

lldpV2Xdot3Conformance OBJECT IDENTIFIER
    ::= { ieee8023lldpV2Xdot3MIB 2 }

lldpV2Xdot3Compliances OBJECT IDENTIFIER
    ::= { lldpV2Xdot3Conformance 1 }

lldpV2Xdot3Groups OBJECT IDENTIFIER
    ::= { lldpV2Xdot3Conformance 2 }

lldpV2Xdot3ConfigGroup OBJECT-GROUP
    OBJECTS      { lldpV2Xdot3PortConfigTLVsTxEnable }
    STATUS      current
    DESCRIPTION
        "The collection of objects that are used to configure the
         LLDP IEEE 802.3 organizational extension implementation
         behavior."
    ::= { lldpV2Xdot3Groups 1 }

lldpV2Xdot3LocSysGroup OBJECT-GROUP
    OBJECTS      { lldpV2Xdot3LocPortAutoNegSupported,
                  lldpV2Xdot3LocPortAutoNegEnabled,
                  lldpV2Xdot3LocPortAutoNegAdvertisedCap,
                  lldpV2Xdot3LocPortOperMauType,
                  lldpV2Xdot3LocPowerPortClass,
                  lldpV2Xdot3LocPowerMDISupported,
                  lldpV2Xdot3LocPowerMDIEnabled,
                  lldpV2Xdot3LocPowerPairControlable,
                  lldpV2Xdot3LocPowerPairs, lldpV2Xdot3LocPowerClass,
                  lldpV2Xdot3LocMaxFrameSize, lldpV2Xdot3LocPowerType,
                  lldpV2Xdot3LocPowerSource, lldpV2Xdot3LocPowerPriority,

```

```

lldpV2Xdot3LocPDRequestedPowerValue,
lldpV2Xdot3LocPSEAllocatedPowerValue,
lldpV2Xdot3LocResponseTime, lldpV2Xdot3LocReady,
lldpV2Xdot3LocTxTwSys, lldpV2Xdot3LocTxTwSysEcho,
lldpV2Xdot3LocRxTwSys, lldpV2Xdot3LocRxTwSysEcho,
lldpV2Xdot3LocFbTwSys, lldpV2Xdot3TxDllReady,
lldpV2Xdot3RxDllReady, lldpV2Xdot3LocDllEnabled,
lldpV2Xdot3LocPDRequestedPowerValueA,
lldpV2Xdot3LocPDRequestedPowerValueB,
lldpV2Xdot3LocPSEAllocatedPowerValueA,
lldpV2Xdot3LocPSEAllocatedPowerValueB,
lldpV2Xdot3LocPSEPoweringStatus,
lldpV2Xdot3LocPDPoweredStatus,
lldpV2Xdot3LocPowerPairsExt,
lldpV2Xdot3LocPowerClassExtA,
lldpV2Xdot3LocPowerClassExtB,
lldpV2Xdot3LocPowerClassExt,
lldpV2Xdot3LocPowerTypeExt, lldpV2Xdot3LocPDLoad,
lldpV2Xdot3LocPD4PID, lldpV2Xdot3LocPSEMaxAvailPower,
lldpV2Xdot3LocPSEAutoclassSupport,
lldpV2Xdot3LocPSEAutoclassCompleted,
lldpV2Xdot3LocPSEAutoclassRequest,
lldpV2Xdot3LocPowerDownRequest,
lldpV2Xdot3LocPowerDownTime,
lldpV2Xdot3LocMeasVoltageSupport,
lldpV2Xdot3LocMeasCurrentSupport,
lldpV2Xdot3LocMeasPowerSupport,
lldpV2Xdot3LocMeasEnergySupport,
lldpV2Xdot3LocMeasurementSource,
lldpV2Xdot3LocMeasVoltageRequest,
lldpV2Xdot3LocMeasCurrentRequest,
lldpV2Xdot3LocMeasPowerRequest,
lldpV2Xdot3LocMeasEnergyRequest,
lldpV2Xdot3LocMeasVoltageValid,
lldpV2Xdot3LocMeasCurrentValid,
lldpV2Xdot3LocMeasPowerValid,
lldpV2Xdot3LocMeasEnergyValid,
lldpV2Xdot3LocMeasVoltageUncertainty,
lldpV2Xdot3LocMeasCurrentUncertainty,
lldpV2Xdot3LocMeasPowerUncertainty,
lldpV2Xdot3LocMeasEnergyUncertainty,
lldpV2Xdot3LocVoltageMeasurement,
lldpV2Xdot3LocCurrentMeasurement,
lldpV2Xdot3LocPowerMeasurement,
lldpV2Xdot3LocEnergyMeasurement,
lldpV2Xdot3LocPSEPowerPriceIndex, lldpV2Xdot3LocTxFw,
lldpV2Xdot3LocTxFwEcho, lldpV2Xdot3LocRxFw,
lldpV2Xdot3LocRxFwEcho, lldpV2Xdot3LocPreemptSupported,
lldpV2Xdot3LocPreemptEnabled,
lldpV2Xdot3LocPreemptActive,
lldpV2Xdot3LocAddFragSize }

```

STATUS current

DESCRIPTION

"The collection of objects that are used to represent LLDP

IEEE 802.3 organizational extension Local Device Information."  
 ::= { lldpV2Xdot3Groups 2 }

lldpV2Xdot3RemSysGroup OBJECT-GROUP

OBJECTS { lldpV2Xdot3RemPortAutoNegSupported,  
 lldpV2Xdot3RemPortAutoNegEnabled,  
 lldpV2Xdot3RemPortAutoNegAdvertisedCap,  
 lldpV2Xdot3RemPortOperMauType,  
 lldpV2Xdot3RemPowerPortClass,  
 lldpV2Xdot3RemPowerMDISupported,  
 lldpV2Xdot3RemPowerMDIEnabled,  
 lldpV2Xdot3RemPowerPairControlable,  
 lldpV2Xdot3RemPowerPairs, lldpV2Xdot3RemPowerClass,  
 lldpV2Xdot3RemMaxFrameSize, lldpV2Xdot3RemPowerType,  
 lldpV2Xdot3RemPowerSource, lldpV2Xdot3RemPowerPriority,  
 lldpV2Xdot3RemPDRequestedPowerValue,  
 lldpV2Xdot3RemPSEAllocatedPowerValue,  
 lldpV2Xdot3RemTxTwSys, lldpV2Xdot3RemTxTwSysEcho,  
 lldpV2Xdot3RemRxTwSys, lldpV2Xdot3RemRxTwSysEcho,  
 lldpV2Xdot3RemFbTwSys,  
 lldpV2Xdot3RemPDRequestedPowerValueA,  
 lldpV2Xdot3RemPDRequestedPowerValueB,  
 lldpV2Xdot3RemPSEAllocatedPowerValueA,  
 lldpV2Xdot3RemPSEAllocatedPowerValueB,  
 lldpV2Xdot3RemPSEPoweringStatus,  
 lldpV2Xdot3RemPDPoweredStatus,  
 lldpV2Xdot3RemPowerPairsExt,  
 lldpV2Xdot3RemPowerClassExtA,  
 lldpV2Xdot3RemPowerClassExtB,  
 lldpV2Xdot3RemPowerClassExt,  
 lldpV2Xdot3RemPowerTypeExt, lldpV2Xdot3RemPDLoad,  
 lldpV2Xdot3RemPD4PID, lldpV2Xdot3RemPSEMaxAvailPower,  
 lldpV2Xdot3RemPSEAutoclassSupport,  
 lldpV2Xdot3RemPSEAutoclassCompleted,  
 lldpV2Xdot3RemPSEAutoclassRequest,  
 lldpV2Xdot3RemPowerDownRequest,  
 lldpV2Xdot3RemPowerDownTime,  
 lldpV2Xdot3RemMeasVoltageSupport,  
 lldpV2Xdot3RemMeasCurrentSupport,  
 lldpV2Xdot3RemMeasPowerSupport,  
 lldpV2Xdot3RemMeasEnergySupport,  
 lldpV2Xdot3RemMeasurementSource,  
 lldpV2Xdot3RemMeasVoltageRequest,  
 lldpV2Xdot3RemMeasCurrentRequest,  
 lldpV2Xdot3RemMeasPowerRequest,  
 lldpV2Xdot3RemMeasEnergyRequest,  
 lldpV2Xdot3RemMeasVoltageValid,  
 lldpV2Xdot3RemMeasCurrentValid,  
 lldpV2Xdot3RemMeasPowerValid,  
 lldpV2Xdot3RemMeasEnergyValid,  
 lldpV2Xdot3RemMeasVoltageUncertainty,  
 lldpV2Xdot3RemMeasCurrentUncertainty,  
 lldpV2Xdot3RemMeasPowerUncertainty,  
 lldpV2Xdot3RemMeasEnergyUncertainty,



```

        lldpV2Xdot3RemVoltageMeasurement,
        lldpV2Xdot3RemCurrentMeasurement,
        lldpV2Xdot3RemPowerMeasurement,
        lldpV2Xdot3RemEnergyMeasurement,
        lldpV2Xdot3RemPSEPowerPriceIndex, lldpV2Xdot3RemTxFw,
        lldpV2Xdot3RemTxFwEcho, lldpV2Xdot3RemRxFw,
        lldpV2Xdot3RemRxFwEcho, lldpV2Xdot3RemPreemptSupported,
        lldpV2Xdot3RemPreemptEnabled,
        lldpV2Xdot3RemPreemptActive,
lldpV2Xdot3RemAddFragSize }
    STATUS      current
    DESCRIPTION
        "The collection of objects that are used to represent LLDP
        IEEE 802.3 organizational extension Local Device Information."
    ::= { lldpV2Xdot3Groups 3 }

```

```

lldpV2Xdot3TxRxCompliance MODULE-COMPLIANCE
    STATUS      current
    DESCRIPTION
        "A compliance statement for SNMP entities that implement
        the LLDP IEEE 802.3 organizational extension MIB.
        This group is mandatory for all agents that implement the
        LLDP IEEE 802.3 organizational extension in TX and/or RX mode.
        This version defines compliance requirements for
        V2 of the LLDP MIB."
    MODULE      -- this module
        MANDATORY-GROUPS      { lldpV2Xdot3ConfigGroup }
    MODULE      IF-MIB
        MANDATORY-GROUPS      { ifGeneralInformationGroup }
    ::= { lldpV2Xdot3Compliances 1 }

```

```

lldpV2Xdot3TxCompliance MODULE-COMPLIANCE
    STATUS      current
    DESCRIPTION
        "The compliance statement for SNMP entities that implement
        the LLDP IEEE 802.3 organizational extension MIB.
        This group is mandatory for agents that implement the
        LLDP IEEE 802.3 organizational extension in the TX mode.
        This version defines compliance requirements for
        V2 of the LLDP MIB."
    MODULE      -- this module
        MANDATORY-GROUPS      { lldpV2Xdot3LocSysGroup }

```

```

 ::= { lldpV2Xdot3Compliances 2 }

lldpV2Xdot3RxCompliance MODULE-COMPLIANCE
    STATUS          current
    DESCRIPTION
        "The compliance statement for SNMP entities that implement
        the LLDP IEEE 802.3 organizational extension MIB.

        This group is mandatory for agents that implement the
        LLDP IEEE 802.3 organizational extension in the RX mode.

        This version defines compliance requirements for
        V2 of the LLDP MIB."

    MODULE          -- this module

        MANDATORY-GROUPS          { lldpV2Xdot3RemSysGroup }

 ::= { lldpV2Xdot3Compliances 3 }

END -- end of module IEEE8023-DOT3-LLDP-EXT-V2-MIB.
IEEE8023-POWER-ETHERNET-MIB DEFINITIONS ::= BEGIN

IMPORTS
    SnmpAdminString
        FROM SNMP-FRAMEWORK-MIB
    MODULE-COMPLIANCE, NOTIFICATION-GROUP, OBJECT-GROUP
        FROM SNMPv2-CONF
    Counter32, Gauge32, Integer32, MODULE-IDENTITY, NOTIFICATION-TYPE,
    OBJECT-TYPE, org
        FROM SNMPv2-SMI
    TruthValue
        FROM SNMPv2-TC;

ieee8023powerEthernetMIB MODULE-IDENTITY
    LAST-UPDATED "202307310000Z"
    ORGANIZATION
        "IEEE 802.3 Working Group"
    CONTACT-INFO
        " WG-URL: http://www.ieee802.org/3/index.html
        WG-EMail: mailto:stds-802-3-dialog@ieee.org
        Contact: IEEE 802.3 Working Group Chair
        Postal: C/O IEEE 802.3 Working Group
                IEEE Standards Association
                445 Hoes Lane
                Piscataway, NJ 08854
                USA
        E-mail: mailto:stds-802-3-dialog@ieee.org"
    DESCRIPTION
        "The MIB module for managing Power Source Equipment
        (PSE) specified in IEEE Std 802.3 Clause 33."
    REVISION      "202307310000Z"
    DESCRIPTION
        "Revision, based on an earlier version in IEEE Std 802.3.1-2013

```

addressing changes from IEEE Std 802.3 revisions 2012, 2015,  
2018,  
and 2022."  
REVISION "201304110000Z"  
DESCRIPTION  
"Revision, based on an earlier version in IEEE Std 802.3.1-2011."  
REVISION "201102020000Z"  
DESCRIPTION  
"Initial version, based on an earlier version published  
as RFC 3621."  
::= { org ieee(111) standards-association-numbers-series-standards(2)  
lan-man-stds(802) ieee802dot3(3) ieee802dot3dot1mibs(1) 8 }

pethNotifications OBJECT IDENTIFIER  
::= { ieee8023powerEthernetMIB 0 }

pethObjects OBJECT IDENTIFIER  
::= { ieee8023powerEthernetMIB 1 }

pethPsePortTable OBJECT-TYPE  
SYNTAX SEQUENCE OF PethPsePortEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION  
"A table of objects that display and control the power  
characteristics of power Ethernet ports on a Power Source  
Equipment (PSE) device. This group will be implemented in  
managed power Ethernet switches and mid-span devices.  
Values of all read-write objects in this table are  
persistent at restart/reboot."  
::= { pethObjects 1 }

pethPsePortEntry OBJECT-TYPE  
SYNTAX PethPsePortEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION  
"A set of objects that display and control the power  
characteristics of a power Ethernet PSE port."  
INDEX { pethPsePortGroupIndex, pethPsePortIndex }  
::= { pethPsePortTable 1 }

PethPsePortEntry ::= SEQUENCE {  
pethPsePortGroupIndex Integer32,  
pethPsePortIndex Integer32,  
pethPsePortAdminEnable TruthValue,  
pethPsePortPowerPairsControlAbility TruthValue,  
pethPsePortPowerPairs INTEGER,  
pethPsePortDetectionStatus INTEGER,  
pethPsePortPowerPriority INTEGER,  
pethPsePortMPSAbsentCounter Counter32,  
pethPsePortType SnmpAdminString,  
pethPsePortPowerClassifications INTEGER,

```

    pethPsePortInvalidSignatureCounter      Counter32,
    pethPsePortPowerDeniedCounter          Counter32,
    pethPsePortOverLoadCounter             Counter32,
    pethPsePortShortCounter                Counter32,
    pethPsePortActualPower                 Integer32,
    pethPsePortPowerAccuracy               Integer32,
    pethPsePortCumulativeEnergy            Counter32,
    pethPsePortAdminState                  TruthValue
}

pethPsePortGroupIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This variable uniquely identifies the group
        containing the port to which a power Ethernet PSE is
        connected. Group means box in the stack, module in a
        rack and the value 1 shall be used for non-modular devices.
        Furthermore, the same value shall be used in this variable,
        pethMainPseGroupIndex, and pethNotificationControlGroupIndex
        to refer to a given box in a stack or module in a rack."
    ::= { pethPsePortEntry 1 }

pethPsePortIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This variable uniquely identifies the power Ethernet PSE
        port within group pethPsePortGroupIndex to which the
        power Ethernet PSE entry is connected."
    ::= { pethPsePortEntry 2 }

pethPsePortAdminEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "true (1) Enable PSE functions.
        false (2) Disable PSE functions."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.2.1"
    ::= { pethPsePortEntry 3 }

pethPsePortPowerPairsControlAbility OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Describes the capability of controlling the power pairs
        functionality to switch pins for sourcing power.
        The value true indicate that the device has the capability
        to control the power pairs. When false the PSE Pinout

```

Alternative used cannot be controlled through the  
PethPsePortAdminEnable attribute."

REFERENCE

"IEEE Std 802.3, 30.9.1.1.3"

::= { pethPsePortEntry 4 }

pethPsePortPowerPairs OBJECT-TYPE

SYNTAX INTEGER { signal(1), spare(2), both(3) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"Describes or controls the pairs in use. If the value of  
pethPsePortPowerPairsControl is true, this object is  
writeable.

A value of signal(1) means that the signal pairs  
only are in use.

A value of spare(2) means that the spare pairs  
only are in use.

A value of both(3) means that both signal and spare  
pairs are in use"

REFERENCE

"IEEE Std 802.3, 30.9.1.1.4"

::= { pethPsePortEntry 5 }

pethPsePortDetectionStatus OBJECT-TYPE

SYNTAX INTEGER { disabled(1), searching(2), deliveringPower(3),  
fault(4), test(5), otherFault(6) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"Describes the operational status of the port PD detection.

A value of disabled(1) - indicates that the PSE State diagram  
is in the state DISABLED.

A value of searching(2) - indicates the PSE State diagram is  
in a state other than those listed above.

A value of deliveringPower(3) - indicates that the PSE State  
diagram is in the state POWER\_ON for a duration greater than  
tlim max (see IEEE Std 802.3, Table 33-11).

A value of fault(4) - indicates that the PSE State diagram is  
in the state TEST\_ERROR.

A value of test(5) - indicates that the PSE State diagram is  
in the state TEST\_MODE.

A value of otherFault(6) - indicates that the PSE State  
diagram is in the state IDLE due to the variable  
error\_conditions."

REFERENCE

"IEEE Std 802.3, 30.9.1.1.5"

::= { pethPsePortEntry 6 }

pethPsePortPowerPriority OBJECT-TYPE

SYNTAX INTEGER { critical(1), high(2), low(3) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This object controls the priority of the port from the point of view of a power management algorithm. The priority that is set by this variable could be used by a control mechanism that prevents over current situations by disconnecting first ports with lower power priority. Ports that connect devices critical to the operation of the network - like the E911 telephones ports - should be set to higher priority."

REFERENCE

"IEEE Std 802.3, ??????"  
 ::= { pethPsePortEntry 7 }

pethPsePortMPSAbsentCounter OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This counter is incremented when the PSE doesn't detect a PD when powering up."

REFERENCE

\* "IEEE Std 802.3, 30.9.1.1.20"  
 ::= { pethPsePortEntry 8 }

pethPsePortType OBJECT-TYPE

SYNTAX SnmpAdminString  
MAX-ACCESS read-write  
STATUS current  
DESCRIPTION

\* "A manager will set the value of this variable to indicate the type of powered device that is connected to the port. The default value supplied by the agent if no value has ever been set should be a zero-length octet string."

REFERENCE

"IEEE Std 802.3, ??????"  
 ::= { pethPsePortEntry 9 }

pethPsePortPowerClassifications OBJECT-TYPE

SYNTAX v  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

\* "Classification is a way to tag different terminals on the Power over LAN network according to their power consumption."

The meaning of the classification labels is defined in IEEE Std 802.3 Clause 145.

This variable is valid only while a PD is being powered, that is, while the attribute pethPsePortDetectionStatus is reporting the enumeration deliveringPower."

REFERENCE

"IEEE Std 802.3, 30.9.1.1.8"  
 ::= { pethPsePortEntry 10 }

```

pethPsePortInvalidSignatureCounter OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This counter is incremented when a Type 1 or Type 2 PSE
        detects an invalid signature from the port."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.1.11"
    ::= { pethPsePortEntry 11 }

pethPsePortPowerDeniedCounter OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This counter is incremented when the PSE denies power to the
        PD."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.1.14"
    ::= { pethPsePortEntry 12 }

pethPsePortOverLoadCounter OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This counter is incremented when the PSE output current
        has gone into overload."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.1.17"
    ::= { pethPsePortEntry 13 }

pethPsePortShortCounter OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      obsolete
    DESCRIPTION
        "Obsolete."
    ::= { pethPsePortEntry 14 }

pethPsePortActualPower OBJECT-TYPE
    SYNTAX      Integer32
    UNITS       "Milliwatts"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The power being supplied by the PSE to the PD
        measured at the MDI."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.1.23"
    ::= { pethPsePortEntry 15 }

pethPsePortPowerAccuracy OBJECT-TYPE

```

```
SYNTAX      Integer32
UNITS       "Milliwatts"
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "The accuracy of the power measurement at MDI."
REFERENCE
    "IEEE Std 802.3, 30.9.1.1.24"
::= { pethPsePortEntry 16 }
```

```
pethPsePortCumulativeEnergy OBJECT-TYPE
    SYNTAX      Counter32
    UNITS       "Millijoules"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The cumulative energy supplied by the PSE ."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.1.25"
    ::= { pethPsePortEntry 17 }
```

```
pethPsePortAdminState OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "true (1) PSE functions are enabled.
         false(2) PSE functions are disabled."
    REFERENCE
        "IEEE Std 802.3, 30.9.1.1.2"
    ::= { pethPsePortEntry 18 }
```

```
pethMainPseObjects OBJECT IDENTIFIER
    ::= { pethObjects 3 }
```

```
pethMainPseTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF PethMainPseEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table of objects that display and control attributes
         of the main power source in a PSE device. Ethernet
         switches are one example of devices that would support
         these objects.
         Values of all read-write objects in this table are
         persistent at restart/reboot."
    ::= { pethMainPseObjects 1 }
```

```
pethMainPseEntry OBJECT-TYPE
    SYNTAX      PethMainPseEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A set of objects that display and control the Main
```



```

        power of a PSE."
INDEX      { pethMainPseGroupIndex }
::= { pethMainPseTable 1 }

PethMainPseEntry ::= SEQUENCE {
    pethMainPseGroupIndex      Integer32,
    pethMainPsePower           Gauge32,
    pethMainPseOperStatus      INTEGER,
    pethMainPseConsumptionPower Gauge32,
    pethMainPseUsageThreshold  Integer32
}

pethMainPseGroupIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This variable uniquely identifies the group to which
        power Ethernet PSE is connected. Group means (box in
        the stack, module in a rack) and the value 1 shall be
        used for non-modular devices. Furthermore, the same
        value shall be used in this variable, pethPsePortGroupIndex,
        and pethNotificationControlGroupIndex to refer to a
        given box in a stack or module in a rack."
    ::= { pethMainPseEntry 1 }

pethMainPsePower OBJECT-TYPE
    SYNTAX      Gauge32 (1..65535)
    UNITS       "Watts"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The nominal power of the PSE expressed in Watts."
    ::= { pethMainPseEntry 2 }

pethMainPseOperStatus OBJECT-TYPE
    SYNTAX      INTEGER { on(1), off(2), faulty(3) }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The operational status of the main PSE."
    ::= { pethMainPseEntry 3 }

pethMainPseConsumptionPower OBJECT-TYPE
    SYNTAX      Gauge32
    UNITS       "Watts"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Measured usage power expressed in Watts."
    ::= { pethMainPseEntry 4 }

pethMainPseUsageThreshold OBJECT-TYPE
    SYNTAX      Integer32 (1..99)

```

```

UNITS          "%"
MAX-ACCESS    read-write
STATUS        current
DESCRIPTION
    "The usage threshold expressed in percents for
    comparing the measured power and initiating
    an alarm if the threshold is exceeded."
::= { pethMainPseEntry 5 }

pethNotificationControl OBJECT IDENTIFIER
::= { pethObjects 4 }

pethNotificationControlTable OBJECT-TYPE
SYNTAX        SEQUENCE OF PethNotificationControlEntry
MAX-ACCESS    not-accessible
STATUS        current
DESCRIPTION
    "A table of objects that display and control the
    Notification on a PSE device.
    Values of all read-write objects in this table are
    persistent at restart/reboot."
::= { pethNotificationControl 1 }

pethNotificationControlEntry OBJECT-TYPE
SYNTAX        PethNotificationControlEntry
MAX-ACCESS    not-accessible
STATUS        current
DESCRIPTION
    "A set of objects that control the Notification events."
INDEX         { pethNotificationControlGroupIndex }
::= { pethNotificationControlTable 1 }

PethNotificationControlEntry ::= SEQUENCE {
    pethNotificationControlGroupIndex Integer32,
    pethNotificationControlEnable     TruthValue
}

pethNotificationControlGroupIndex OBJECT-TYPE
SYNTAX        Integer32 (1..2147483647)
MAX-ACCESS    not-accessible
STATUS        current
DESCRIPTION
    "This variable uniquely identifies the group. Group
    means box in the stack, module in a rack and the value
    1 shall be used for non-modular devices. Furthermore,
    the same value shall be used in this variable,
    pethPsePortGroupIndex, and
    pethMainPseGroupIndex to refer to a given box in a
    stack or module in a rack."
::= { pethNotificationControlEntry 1 }

pethNotificationControlEnable OBJECT-TYPE
SYNTAX        TruthValue
MAX-ACCESS    read-write

```

```

STATUS      current
DESCRIPTION
    "This object controls, on a per-group basis, whether
    or not notifications from the agent are enabled. The
    value true(1) means that notifications are enabled; the
    value false(2) means that they are not."
 ::= { pethNotificationControlEntry 2 }

pethConformance OBJECT IDENTIFIER
 ::= { ieee8023powerEthernetMIB 2 }

pethCompliances OBJECT IDENTIFIER
 ::= { pethConformance 1 }

pethGroups OBJECT IDENTIFIER
 ::= { pethConformance 2 }

pethPsePortOnOffNotification NOTIFICATION-TYPE
OBJECTS      { pethPsePortDetectionStatus }
STATUS      current
DESCRIPTION
    "This Notification indicates if Pse Port is delivering or
    not power to the PD. This Notification should be sent on
    every status change except in the searching mode.
    At least 500 msec shall elapse between notifications
    being emitted by the same object instance."
 ::= { pethNotifications 1 }

pethMainPowerUsageOnNotification NOTIFICATION-TYPE
OBJECTS      { pethMainPseConsumptionPower }
STATUS      current
DESCRIPTION
    "This Notification indicate PSE Threshold usage
    indication is on, the usage power is above the
    threshold. At least 500 msec shall elapse between
    notifications being emitted by the same object
    instance."
 ::= { pethNotifications 2 }

pethMainPowerUsageOffNotification NOTIFICATION-TYPE
OBJECTS      { pethMainPseConsumptionPower }
STATUS      current
DESCRIPTION
    "This Notification indicates PSE Threshold usage indication
    off, the usage power is below the threshold.
    At least 500 msec shall elapse between notifications being
    emitted by the same object instance."
 ::= { pethNotifications 3 }

pethPsePortGroup OBJECT-GROUP
OBJECTS      { pethPsePortAdminEnable,
              pethPsePortPowerPairsControlAbility,
              pethPsePortPowerPairs, pethPsePortDetectionStatus,
              pethPsePortPowerPriority, pethPsePortMPSAbsentCounter,

```



```

GROUP    pethMainPseGroup
DESCRIPTION
    "The pethMainPseGroup is mandatory for PSE systems
    that implement a main power supply."

GROUP    pethMainPowerNotificationGroup
DESCRIPTION
    "The pethMainPowerNotificationGroup is mandatory for
    PSE systems that implement a main power supply."

 ::= { pethCompliances 1 }

END -- end of module IEEE8023-POWER-ETHERNET-MIB.
IEEE8023-EtherLike-MIB DEFINITIONS ::= BEGIN

IMPORTS
    InterfaceIndex, ifIndex
        FROM IF-MIB
    MODULE-COMPLIANCE, OBJECT-GROUP
        FROM SNMPv2-CONF
    Counter32, Counter64, Integer32, MODULE-IDENTITY, OBJECT-TYPE,
    Unsigned32, org
        FROM SNMPv2-SMI
    TruthValue
        FROM SNMPv2-TC;

ieee8023etherMIB MODULE-IDENTITY
    LAST-UPDATED "202307310000Z"
    ORGANIZATION
        "IEEE 802.3 Working Group"
    CONTACT-INFO
        " WG-URL: http://www.ieee802.org/3/index.html
        WG-Email: mailto:stds-802-3-dialog@ieee.org
        Contact: IEEE 802.3 Working Group Chair
        Postal: C/O IEEE 802.3 Working Group
                IEEE Standards Association
                445 Hoes Lane
                Piscataway, NJ 08854
                USA
        E-mail: mailto:stds-802-3-dialog@ieee.org"
    DESCRIPTION
        "The MIB module to describe generic objects for
        Ethernet-like network interfaces."
    REVISION    "202307310000Z"
    DESCRIPTION
        "Revisionx based on an earlier version in IEEE Std 802.3.1-2013
        addressing changes from IEEE Std 802.3 revisions 2012, 2015,
        2018,
        and 2022."
    REVISION    "201304110000Z"
    DESCRIPTION
        "Revision, based on an earlier version in IEEE Std 802.3.1-2011."
    REVISION    "201102020000Z"
    DESCRIPTION

```

```
        "Initial version, based on an earlier version published
        in RFC 3635."
 ::= { org ieee(111) standards-association-numbers-series-standards(2)
 lan-man-stds(802) ieee802dot3(3) ieee802dot3dot1mibs(1) 10 }
```

```
ieee8023etherMIBObjects OBJECT IDENTIFIER
 ::= { ieee8023etherMIB 1 }
```

```
dot3StatsTable OBJECT-TYPE
 SYNTAX          SEQUENCE OF Dot3StatsEntry
 MAX-ACCESS      not-accessible
 STATUS          current
 DESCRIPTION
     "Statistics for a collection of Ethernet-like
     interfaces attached to a particular system.
     There will be one row in this table for each
     Ethernet-like interface in the system.
```

```
     For interfaces operating at 10 Gb/s or more, 32 bit frame
     based counters can roll over in less than 5 minutes if they
```

```
are
```

```
     incrementing at their maximum rate. Management stations are
     advised to use the 'HC'/64 bit versions of these counters.
```

```
     Discontinuities in the values of counters in this table
     can occur at re-initialization of the management
     system, and at other times as indicated by the
     value of ifCounterDiscontinuityTime."
```

```
 ::= { ieee8023etherMIBObjects 2 }
```

```
dot3StatsEntry OBJECT-TYPE
 SYNTAX          Dot3StatsEntry
 MAX-ACCESS      not-accessible
 STATUS          current
 DESCRIPTION
     "Statistics for a particular interface to an
     Ethernet-like medium."
 INDEX          { dot3StatsIndex }
 ::= { dot3StatsTable 1 }
```

```
Dot3StatsEntry ::= SEQUENCE {
    dot3StatsIndex          InterfaceIndex,
    dot3StatsAlignmentErrors Counter32,
    dot3StatsFCSErrors      Counter32,
    dot3StatsSingleCollisionFrames Counter32,
    dot3StatsMultipleCollisionFrames Counter32,
    dot3StatsSQETestErrors  Counter32,
    dot3StatsDeferredTransmissions Counter32,
    dot3StatsLateCollisions Counter32,
    dot3StatsExcessiveCollisions Counter32,
    dot3StatsInternalMacTransmitErrors Counter32,
    dot3StatsCarrierSenseErrors Counter32,
    dot3StatsFrameTooLongs Counter32,
```

```

dot3StatsInternalMacReceiveErrors    Counter32,
dot3StatsSymbolErrors                Counter32,
dot3StatsDuplexStatus                INTEGER,
dot3StatsRateControlAbility          TruthValue,
dot3StatsRateControlStatus           INTEGER,
dot3StatsMaxFrameLength              INTEGER
}

```

```

dot3StatsIndex OBJECT-TYPE
    SYNTAX      InterfaceIndex
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An index value that uniquely identifies an
        interface to an Ethernet-like medium. The
        interface identified by a particular value of
        this index is the same interface as identified
        by the same value of ifIndex."
    REFERENCE
        "IETF RFC 2863, ifIndex"
    ::= { dot3StatsEntry 1 }

```

```

dot3StatsAlignmentErrors OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of frames received on a particular
        interface that are not an integral number of
        octets in length and do not pass the FCS check.

        The count represented by an instance of this
        object is incremented when the alignmentError
        status is returned by the MAC service to the
        MAC client. Received frames for
        which multiple error conditions pertain are,
        according to the conventions of IEEE 802.3
        Layer Management, counted exclusively according
        to the error status presented to the MAC client.


        This counter does not increment for group
        encoding schemes greater than 4 bits per group."
    REFERENCE
        "IEEE Std 802.3, 30.3.1.1.7"
    ::= { dot3StatsEntry 2 }

```

```

dot3StatsFCSErrors OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of frames received on a particular
        interface that are an integral number of octets
        in length but do not pass the FCS check. This

```

 count does not include frames received with frame-too-long or frame-too-short error.

The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the MAC client (). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the MAC client.

Note: Coding errors detected by the Physical Layer for speeds above 10 Mb/s will cause the frame to fail the FCS check."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.6"  
 ::= { dot3StatsEntry 3 }

dot3StatsSingleCollisionFrames OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current

DESCRIPTION

"A count of frames that are involved in a single collision, and are subsequently transmitted successfully.

A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts, ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsMultipleCollisionFrames object.

This counter does not increment when the interface is operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.3"  
 ::= { dot3StatsEntry 4 }

dot3StatsMultipleCollisionFrames OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current

DESCRIPTION

"A count of frames that are involved in more than one collision and are subsequently transmitted successfully.

A frame that is counted by an instance of this object is also counted by the corresponding instance of either the ifOutUcastPkts,



ifOutMulticastPkts, or ifOutBroadcastPkts, and is not counted by the corresponding instance of the dot3StatsSingleCollisionFrames object.

This counter does not increment when the interface is operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.4"  
 ::= { dot3StatsEntry 5 }

dot3StatsSQETestErrors OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of times that the SQE TEST ERROR is received on a particular interface. The SQE TEST ERROR is set in accordance with the rules for verification of the SQE detection mechanism in the PLS Carrier Sense Function."

This counter does not increment on interfaces operating at speeds greater than 10 Mb/s, or on interfaces operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.4"  
 ::= { dot3StatsEntry 6 }

dot3StatsDeferredTransmissions OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of frames for which the first transmission attempt on a particular interface is delayed because the medium is busy."

The count represented by an instance of this object does not include frames involved in collisions.

This counter does not increment when the interface is operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.9"  
 ::= { dot3StatsEntry 7 }

dot3StatsLateCollisions OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"The number of times that a collision is

detected on a particular interface later than one slotTime into the transmission of a packet.

A (late) collision included in a count represented by an instance of this object is also considered as a (generic) collision for purposes of other collision-related statistics.

This counter does not increment when the interface is operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.10"

::= { dot3StatsEntry 8 }

dot3StatsExcessiveCollisions OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A count of frames for which transmission on a particular interface fails due to excessive collisions.

This counter does not increment when the interface is operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.11"

::= { dot3StatsEntry 9 }

dot3StatsInternalMacTransmitErrors OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object.

The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.12"

::= { dot3StatsEntry 10 }

dot3StatsCarrierSenseErrors OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"The number of times that the carrier sense condition was lost or never asserted when attempting to transmit a frame on a particular interface.

The count represented by an instance of this object is incremented at most once per transmission attempt, even if the carrier sense condition fluctuates during a transmission attempt.

This counter does not increment when the interface is operating in full-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.13"  
 ::= { dot3StatsEntry 11 }

dot3StatsFrameTooLong OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of frames received on a particular interface that exceed the maximum permitted frame size.

The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the MAC client. Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the MAC client."



REFERENCE

"IEEE Std 802.3, 30.3.1.1.25"  
 ::= { dot3StatsEntry 13 }

dot3StatsInternalMacReceiveErrors OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the

dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object.

The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.15"  
 ::= { dot3StatsEntry 16 }

dot3StatsSymbolErrors OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present.

For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII.

For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII.

For an interface operating at 10 Gb/s, 40 Gb/s, and 100 Gb/s, it is a count of the number of times the receiving media is non-idle (the time between the Start of Packet Delimiter and the End of Packet Delimiter) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII, the XLGMII, or the CGMII.

The count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present.

This counter does not increment when the interface is operating at 10 Mb/s."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.5"  
 ::= { dot3StatsEntry 17 }

dot3StatsDuplexStatus OBJECT-TYPE

SYNTAX INTEGER { unknown(1), halfDuplex(2), fullDuplex(3) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The current mode of operation of the MAC entity. 'unknown' indicates that the current duplex mode could not be determined.

Management control of the duplex mode is accomplished through the MAU MIB. When an interface does not support autonegotiation, or when autonegotiation is not enabled, the duplex mode is controlled using ifMauDefaultType. When autonegotiation is supported and enabled, duplex mode is controlled using ifMauAutoNegAdvertisedBits. In either case, the currently operating duplex mode is reflected both in this object and in ifMauType.

Note that this object provides redundant information with ifMauType. Normally, redundant objects are discouraged. However, in this instance, it allows a management application to determine the duplex status of an interface without having to know every possible value of ifMauType. This was felt to be sufficiently valuable to justify the redundancy."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.32"  
 ::= { dot3StatsEntry 18 }

dot3StatsRateControlAbility OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"'true' for interfaces operating at speeds above 1000 Mb/s that support Rate Control through lowering the average data rate of the MAC sublayer, with frame granularity, and 'false' otherwise."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.33"  
 ::= { dot3StatsEntry 19 }

dot3StatsRateControlStatus OBJECT-TYPE

```
SYNTAX      INTEGER { rateControlOff(1), rateControlOn(2),
                    unknown(3) }
MAX-ACCESS  read-write
STATUS      current
DESCRIPTION
    "The current Rate Control mode of operation of
    the MAC sublayer of this interface."
REFERENCE
    "IEEE Std 802.3, 30.3.1.1.34"
 ::= { dot3StatsEntry 20 }
```

```
dot3StatsMaxFrameLength OBJECT-TYPE
SYNTAX      INTEGER { unknown(1), baseFrame(2), qTaggedFrame(3),
                    envelopeFrame(4) }
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "This indicates the MAC frame length at
    which the dot3StatsFrameTooLongs counter is
    incremented."
REFERENCE
    "IEEE Std 802.3, 30.3.1.1.37"
 ::= { dot3StatsEntry 21 }
```

```
dot3CollTable OBJECT-TYPE
SYNTAX      SEQUENCE OF Dot3CollEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "A collection of collision histograms for a
    particular set of interfaces.

    Discontinuities in the values of counters in this table
    can occur at re-initialization of the management
    system, and at other times as indicated by the
    value of ifCounterDiscontinuityTime."
REFERENCE
    "IEEE Std 802.3, 30.3.1.1.30"
 ::= { ieee8023etherMIBObjects 5 }
```

```
dot3CollEntry OBJECT-TYPE
SYNTAX      Dot3CollEntry
MAX-ACCESS  not-accessible
STATUS      current
DESCRIPTION
    "A cell in the histogram of per-frame
    collisions for a particular interface. An
    instance of this object represents the
    frequency of individual MAC frames for which
    the transmission (successful or otherwise) on a
    particular interface is accompanied by a
    particular number of media collisions."
INDEX      { ifIndex, dot3CollCount }
 ::= { dot3CollTable 1 }
```

```
Dot3CollEntry ::= SEQUENCE {  
    dot3CollCount Integer32,  
    dot3CollFrequencies Counter32  
}
```

```
dot3CollCount OBJECT-TYPE  
    SYNTAX      Integer32 (1..16)  
    MAX-ACCESS  not-accessible  
    STATUS      current  
    DESCRIPTION  
        "The number of per-frame media collisions for  
        which a particular collision histogram cell  
        represents the frequency on a particular  
        interface."  
    ::= { dot3CollEntry 2 }
```

```
dot3CollFrequencies OBJECT-TYPE  
    SYNTAX      Counter32  
    MAX-ACCESS  read-only  
    STATUS      current  
    DESCRIPTION  
        "A count of individual MAC frames for which the  
        transmission (successful or otherwise) on a  
        particular interface occurs after the  
        frame has experienced exactly the number  
        of collisions in the associated  
        dot3CollCount object.  
  
        For example, a frame which is transmitted  
        on interface 77 after experiencing  
        exactly 4 collisions would be indicated  
        by incrementing only dot3CollFrequencies.77.4.  
        No other instance of dot3CollFrequencies would  
        be incremented in this example.  
  
        This counter does not increment when the  
        interface is operating in full-duplex mode."  
    ::= { dot3CollEntry 3 }
```

```
dot3ControlTable OBJECT-TYPE  
    SYNTAX      SEQUENCE OF Dot3ControlEntry  
    MAX-ACCESS  not-accessible  
    STATUS      current  
    DESCRIPTION  
        "A table of descriptive and status information  
        about the MAC Control sublayer on the  
        Ethernet-like interfaces attached to a  
        particular system. There will be one row in  
        this table for each Ethernet-like interface in  
        the system which implements the MAC Control  
        sublayer. If some, but not all, of the  
        Ethernet-like interfaces in the system implement  
        the MAC Control sublayer, there will be fewer
```

rows in this table than in the dot3StatsTable.

are

For interfaces operating at 10 Gb/s or more, 32 bit frame based counters can roll over in less than 5 minutes if they

incrementing at their maximum rate. Management stations are advised to use the 'HC'/64 bit versions of these counters.

Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime."

```
::= { ieee8023etherMIBObjects 9 }
```

```
dot3ControlEntry OBJECT-TYPE
```

```
SYNTAX      Dot3ControlEntry
```

```
MAX-ACCESS  not-accessible
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"An entry in the table, containing information about the MAC Control sublayer on a single Ethernet-like interface."
```

```
INDEX      { dot3StatsIndex }
```

```
::= { dot3ControlTable 1 }
```

```
Dot3ControlEntry ::= SEQUENCE {
```

```
dot3ControlFunctionsSupported  BITS,
```

```
dot3ControlInUnknownOpcodes   Counter32,
```

```
dot3HCControlInUnknownOpcodes Counter64
```

```
}
```

```
dot3ControlFunctionsSupported OBJECT-TYPE
```

```
SYNTAX      BITS { pause(0), mpcp(1), pfc(2), extension(3) }
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"A list of the possible MAC Control functions implemented for this interface."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.3.3.2"
```

```
::= { dot3ControlEntry 1 }
```

```
dot3ControlInUnknownOpcodes OBJECT-TYPE
```

```
SYNTAX      Counter32
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"A count of MAC Control frames received on this interface that contain an opcode that is not supported by this device."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.3.3.5 "
```

```
::= { dot3ControlEntry 2 }
```



dot3HCControlInUnknownOpcodes OBJECT-TYPE

\* SYNTAX Counter64  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION  
"A 64 bit count of MAC Control frames received on this interface that contain an opcode that is not supported by this device."  
REFERENCE  
"IEEE Std 802.3, 30.3.3.5 "  
 ::= { dot3ControlEntry 3 }

dot3PauseTable OBJECT-TYPE

SYNTAX SEQUENCE OF Dot3PauseEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION  
"A table of descriptive and status information about the MAC Control PAUSE function on the Ethernet-like interfaces attached to a particular system. There will be one row in this table for each Ethernet-like interface in the system which supports the MAC Control PAUSE function (i.e., the 'pause' bit in the corresponding instance of dot3ControlFunctionsSupported is set). If some, but not all, of the Ethernet-like interfaces in the system implement the MAC Control PAUSE function (for example, if some interfaces only support half-duplex), there will be fewer rows in this table than in the dot3StatsTable.

are

For interfaces operating at 10 Gb/s or more, 32 bit frame based counters can roll over in less than 5 minutes if they

are incrementing at their maximum rate. Management stations are advised to use the 'HC'/64 bit versions of these counters.

Discontinuities in the values of counters in this table can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime."

::= { ieee8023etherMIBObjects 10 }

dot3PauseEntry OBJECT-TYPE

SYNTAX Dot3PauseEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION  
"An entry in the table, containing information about the MAC Control PAUSE function on a single Ethernet-like interface."  
INDEX { dot3StatsIndex }  
 ::= { dot3PauseTable 1 }

```

dot3PauseEntry ::= SEQUENCE {
    dot3PauseAdminMode    INTEGER,
    dot3PauseOperMode     INTEGER,
    dot3InPauseFrames     Counter32,
    dot3OutPauseFrames     Counter32,
    dot3HCInPauseFrames   Counter64,
    dot3HCOutPauseFrames  Counter64
}

```

dot3PauseAdminMode OBJECT-TYPE

```

SYNTAX      INTEGER { disabled(1), enabledXmit(2), enabledRcv(3),
                    enabledXmitAndRcv(4) }

```

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This object is used to configure the default administrative PAUSE mode for this interface.

This object represents the administratively-configured PAUSE mode for this interface. If Auto-Negotiation is not enabled or is not implemented for the active MAU attached to this interface, the value of this object determines the operational PAUSE mode of the interface whenever it is operating in full-duplex mode. In this case, a set to this object will force the interface into the specified mode.

If Auto-Negotiation is implemented and enabled for the MAU attached to this interface, the PAUSE mode for this interface is determined by Auto-Negotiation, and the value of this object denotes the mode to which the interface will automatically revert if/when Auto-Negotiation is later disabled. Note that when Auto-Negotiation is running, administrative control of the PAUSE mode may be accomplished using the ifMauAutoNegCapAdvertisedBits object in the MAU-MIB module.

Note that the value of this object is ignored when the interface is not operating in full-duplex mode.

An attempt to set this object to 'enabledXmit(2)' or 'enabledRcv(3)' will fail on interfaces that do not support operation at greater than 100 Mb/s."

```
 ::= { dot3PauseEntry 1 }
```

dot3PauseOperMode OBJECT-TYPE

```

SYNTAX      INTEGER { disabled(1), enabledXmit(2), enabledRcv(3),

```

```
                enabledXmitAndRcv(4) }
MAX-ACCESS    read-only
STATUS        current
DESCRIPTION
    "This object reflects the PAUSE mode currently
    in use on this interface, as determined by
    either (1) the result of the Auto-Negotiation
    function or (2) if Auto-Negotiation is not
    enabled or is not implemented for the active MAU
    attached to this interface, by the value of
    dot3PauseAdminMode. Interfaces operating at
    100 Mb/s or less will never return
    'enabledXmit(2)' or 'enabledRcv(3)'. Interfaces
    operating in half-duplex mode will return
    'disabled(1)'. Interfaces on which
    Auto-Negotiation is enabled but not yet
    completed should return the value
    'disabled(1)'."
 ::= { dot3PauseEntry 2 }
```

```
dot3InPauseFrames OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of MAC Control frames received on this
        interface with an opcode indicating the PAUSE
        operation.

        This counter does not increment when the
        interface is operating in half-duplex mode."
    REFERENCE
        "IEEE Std 802.3, 30.3.4.3"
    ::= { dot3PauseEntry 3 }
```

```
dot3OutPauseFrames OBJECT-TYPE
    SYNTAX      Counter32
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of MAC Control frames transmitted on
        this interface with an opcode indicating the
        PAUSE operation.

        This counter does not increment when the
        interface is operating in half-duplex mode."
    REFERENCE
        "IEEE Std 802.3, 30.3.4.2"
    ::= { dot3PauseEntry 4 }
```

```
dot3HCInPauseFrames OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
```

DESCRIPTION

"A 64 bit count of MAC Control frames received on this interface with an opcode indicating the PAUSE operation.

This counter does not increment when the interface is operating in half-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.4.3"  
 ::= { dot3PauseEntry 5 }

dot3HCOutPauseFrames OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A 64 bit count of MAC Control frames transmitted on this interface with an opcode indicating the PAUSE operation.

This counter does not increment when the interface is operating in half-duplex mode."

REFERENCE

"IEEE Std 802.3, 30.3.4.2"  
 ::= { dot3PauseEntry 6 }

dot3HCStatsTable OBJECT-TYPE

SYNTAX SEQUENCE OF Dot3HCStatsEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"A table containing 64-bit versions of error counters from the dot3StatsTable to address counter rollover for interfaces operating at or above 10Gb/s.

For interfaces operating at 10 Gb/s or more, 32 bit frame based counters can roll over in less than 5 minutes if they are

incrementing at their maximum rate. Management stations are advised to use the 'HC'/64 bit versions of these counters.

Discontinuities in the values of counters in this table can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime."

::= { ieee8023etherMIBObjects 11 }

dot3HCStatsEntry OBJECT-TYPE

SYNTAX Dot3HCStatsEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An entry containing 64-bit statistics for a single Ethernet-like interface."

```
INDEX      { dot3StatsIndex }
::= { dot3HCStatsTable 1 }
```

```
Dot3HCStatsEntry ::= SEQUENCE {
    dot3HCStatsAlignmentErrors      Counter64,
    dot3HCStatsFCSErrors            Counter64,
    dot3HCStatsInternalMacTransmitErrors Counter64,
    dot3HCStatsFrameTooLongs       Counter64,
    dot3HCStatsInternalMacReceiveErrors Counter64,
    dot3HCStatsSymbolErrors        Counter64,
    dot3HCStatsTransmitLPIMicroseconds Counter64,
    dot3HCStatsReceiveLPIMicroseconds Counter64,
    dot3HCStatsTransmitLPITransitions Counter64,
    dot3HCStatsReceiveLPITransitions Counter64
}
```

dot3HCStatsAlignmentErrors OBJECT-TYPE

```
SYNTAX      Counter64
MAX-ACCESS  read-only
STATUS      current
```

DESCRIPTION

"A 64 bit count of frames received on a particular interface that are not an integral number of octets in length and do not pass the FCS check.

The count represented by an instance of this object is incremented when the alignmentError status is returned by the MAC service to the MAC client (). Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the MAC client.

This counter does not increment for group encoding schemes greater than 4 bits per group."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.7"

```
::= { dot3HCStatsEntry 1 }
```

dot3HCStatsFCSErrors OBJECT-TYPE

```
SYNTAX      Counter64
MAX-ACCESS  read-only
STATUS      current
```

DESCRIPTION

"A 64 bit count of frames received on a particular interface that are an integral number of octets in length but do not pass the FCS check. This count does not include frames received with frame-too-long or frame-too-short error.

The count represented by an instance of this object is incremented when the frameCheckError status is returned by the MAC service to the

MAC client. Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the MAC client.

Note: Coding errors detected by the Physical Layer for speeds above 10 Mb/s will cause the frame to fail the FCS check."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.6"  
 ::= { dot3HCStatsEntry 2 }

dot3HCStatsInternalMacTransmitErrors OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A 64 bit count of frames for which transmission on a particular interface fails due to an internal MAC sublayer transmit error. A frame is only

counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsLateCollisions object, the dot3StatsExcessiveCollisions object, or the dot3StatsCarrierSenseErrors object.

The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of transmission errors on a particular interface that are not otherwise counted."



REFERENCE

"IEEE Std 802.3, 30.3.1.1.12"  
 ::= { dot3HCStatsEntry 3 }

dot3HCStatsFrameTooLongs OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A 64 bit count of frames received on a particular interface that exceed the maximum permitted frame size.

The count represented by an instance of this object is incremented when the frameTooLong status is returned by the MAC service to the MAC client. Received frames for which multiple error conditions pertain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according

to the error status presented to the MAC client."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.25"

::= { dot3HCStatsEntry 4 }

dot3HCStatsInternalMacReceiveErrors OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A 64 bit count of frames for which reception on a particular interface fails due to an internal MAC sublayer receive error. A frame is only counted by an instance of this object if it is not counted by the corresponding instance of either the dot3StatsFrameTooLongs object, the dot3StatsAlignmentErrors object, or the dot3StatsFCSErrors object.

The precise meaning of the count represented by an instance of this object is implementation-specific. In particular, an instance of this object may represent a count of receive errors on a particular interface that are not otherwise counted."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.15"

::= { dot3HCStatsEntry 5 }

dot3HCStatsSymbolErrors OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"For an interface operating at 100 Mb/s, the number of times there was an invalid data symbol when a valid carrier was present.

For an interface operating in half-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than slotTime, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' or 'carrier extend error' on the GMII.

For an interface operating in full-duplex mode at 1000 Mb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Data reception error' on the GMII.

For an interface operating at 10 Gb/s, 40 Gb/s and 100 Gb/s, the number of times the receiving media is non-idle (a carrier event) for a period of time equal to or greater than minFrameSize, and during which there was at least one occurrence of an event that causes the PHY to indicate 'Receive Error' on the XGMII, the XLGMII, or the CGMII.

The 64 bit count represented by an instance of this object is incremented at most once per carrier event, even if multiple symbol errors occur during the carrier event. This count does not increment if a collision is present."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.5"  
 ::= { dot3HCStatsEntry 6 }

dot3HCStatsTransmitLPIMicroseconds OBJECT-TYPE

SYNTAX Counter64  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count reflecting the amount of time that the LPI\_REQUEST parameter has the value ASSERT. The request is indicated to the PHY according to the requirements of the RS (see IEEE Std 802.3, 22.7, 35.4, and 46.4).

This counter has a maximum increment rate of 1 million counts per second."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.8"  
 ::= { dot3HCStatsEntry 7 }

dot3HCStatsReceiveLPIMicroseconds OBJECT-TYPE

SYNTAX Counter64  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count reflecting the amount of time that the LPI\_INDICATION parameter has the value ASSERT. The indication reflects the state of the PHY according to the requirements of the RS (see IEEE Std 802.3, 22.7, 35.4, and 46.4).

This counter has a maximum increment rate of 1 million counts per second."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.9"  
 ::= { dot3HCStatsEntry 8 }

dot3HCStatsTransmitLPITransitions OBJECT-TYPE

SYNTAX Counter64



MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of occurrences of the transition from state LPI\_DEASSERTED to state LPI\_ASSERTED of the LPI transmit state diagram is the RS. The state transition corresponds to the assertion of the LPI\_REQUEST parameter. The request is indicated to the PHY according to the requirements of the RS (see IEEE Std 802.3, 22.7, 35.4, 46.4.)

This counter has a maximum increment rate of 50 thousand counts per second at 100 Mb/s; 90 thousand counts per second at 1000 Mb/s; and 230 thousand counts per second at 10 Gb/s."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.10"  
 ::= { dot3HCStatsEntry 9 }

dot3HCStatsReceiveLPITransitions OBJECT-TYPE

SYNTAX Counter64  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of occurrences of the transition from DEASSERT to ASSERT of the LPI\_INDICATE parameter. The indication reflects the state of the PHY according to the requirements of the RS (see IEEE Std 802.3, 22.7, 35.4, and 46.4).

This counter has a maximum increment rate of 50 thousand counts per second at 100 Mb/s; 90 thousand counts per second at 1000 Mb/s; and 230 thousand counts per second at 10 Gb/s."

REFERENCE

"IEEE Std 802.3, 30.3.2.1.11"  
 ::= { dot3HCStatsEntry 10 }

dot3SlowProtocolFrameLimit OBJECT-TYPE

SYNTAX Integer32  
MAX-ACCESS read-write  
STATUS current  
DESCRIPTION

"The maximum number of Slow Protocol frames of a given subtype that can be transmitted in a one second interval. The default value is 10."

REFERENCE

"IEEE Std 802.3, 30.3.1.1.38"  
 DEFVAL { 10 }  
 ::= { ieee8023etherMIBObjects 12 }

dot3ExtensionTable OBJECT-TYPE

SYNTAX SEQUENCE OF Dot3ExtensionEntry  
MAX-ACCESS not-accessible

```

STATUS      current
DESCRIPTION
    "A table of status information
    about the Extension MAC Control frames transmitted
    and received on the Ethernet-like interfaces attached
    to a particular system. There will be one row in
    this table for each Ethernet-like interface in
    the system which supports Extension MAC Control
    function (i.e., the 'mcp' bit in the
    corresponding instance of
    dot3ControlFunctionsSupported is set). If some,
    but not all, of the Ethernet-like interfaces in
    the system implement the Extension MAC Control
    function, there will be fewer rows
    in this table than in the dot3StatsTable.

```

are

For interfaces operating at 10 Gb/s or more, 32 bit frame based counters can roll over in less than 5 minutes if they

are incrementing at their maximum rate. Management stations are advised to use the 'HC'/64 bit versions of these counters.

Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime."

```
 ::= { ieee8023etherMIBObjects 13 }
```

```

dot3ExtensionEntry OBJECT-TYPE
    SYNTAX      Dot3ExtensionEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry in the table, containing information
        about the Extension MAC Control function on a single
        Ethernet-like interface."
    INDEX       { dot3StatsIndex }
    ::= { dot3ExtensionTable 1 }

```

```

Dot3ExtensionEntry ::= SEQUENCE {
    dot3HCInExtensionFrames      Counter64,
    dot3HCOutExtensionFrames     Counter64,
    dot3ExtensionMacCtrlStatus   Unsigned32,
    dot3ExtensionMacCtrlAdmin    TruthValue
}

```

```

dot3HCInExtensionFrames OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of Extension MAC Control frames received on
        this interface."
    REFERENCE

```

```

        "IEEE Std 802.3, 30.3.8.2"
 ::= { dot3ExtensionEntry 1 }

dot3HCOutExtensionFrames OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of Extension MAC Control frames transmitted on
        this interface."
    REFERENCE
        "IEEE Std 802.3, 30.3.8.1"
 ::= { dot3ExtensionEntry 2 }

dot3ExtensionMacCtrlStatus OBJECT-TYPE
    SYNTAX      Unsigned32
    MAX-ACCESS  read-only
    STATUS      deprecated
    DESCRIPTION
        "The state of the EXTENSION MAC Control function as described in
        IEEE Std 802.3, 30.3.8.3."
 ::= { dot3ExtensionEntry 3 }

dot3ExtensionMacCtrlAdmin OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The state of the EXTENSION MAC Control function as described in
        IEEE Std 802.3, 30.3.8.3."
    REFERENCE
        "IEEE Std 802.3, 30.3.8.3"
 ::= { dot3ExtensionEntry 4 }

dot3PFCTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Dot3PFCEnt
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table of descriptive and status information
        about the MAC Control Priority-based Flow Control
        function on the Ethernet-like interfaces attached to
        a particular system. There will be one row in
        this table for each Ethernet-like interface in
        the system which supports the MAC Control PFC
        function (i.e., the 'pfc' bit in the
        corresponding instance of
        dot3ControlFunctionsSupported is set). If some,
        but not all, of the Ethernet-like interfaces in
        the system implement the MAC Control PFC
        function (for example, if some interfaces only
        support half-duplex), there will be fewer rows
        in this table than in the dot3StatsTable."

```

Discontinuities in the value of this counter can occur at re-initialization of the management system, and at other times as indicated by the value of ifCounterDiscontinuityTime."

```
::= { ieee8023etherMIBObjects 14 }
```

```
dot3PFCEnterY OBJECT-TYPE
    SYNTAX      Dot3PFCEnterY
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry in the table, containing information
        about the MAC Control PFC function on a single
        Ethernet-like interface."
    INDEX       { dot3StatsIndex }
    ::= { dot3PFCTable 1 }
```

```
Dot3PFCEnterY ::= SEQUENCE {
    dot3PFCAAdminMode    INTEGER,
    dot3PFCEnterYOperMode    INTEGER,
    dot3HCInPFCFrames    Counter64,
    dot3HCOutPFCFrames    Counter64
}
```

```
dot3PFCAAdminMode OBJECT-TYPE
    SYNTAX      INTEGER { disabled(1), enabled(2) }
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "This object is used to configure the default
        administrative PFC mode for this interface.

        This object represents the
        administratively-configured PFC mode for this
        interface. The value of this
        object determines the operational PFC mode
        of the interface. A set to this
        object will force the interface into the
        specified mode.

        Note that the value of this object is ignored
        when the interface is not operating in
        full-duplex mode."
    ::= { dot3PFCEnterY 1 }
```

```
dot3PFCEnterYOperMode OBJECT-TYPE
    SYNTAX      INTEGER { disabled(1), enabled(2) }
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "This object reflects the PFC mode currently
        in use on this interface, as determined by
        by the value of dot3PFCAAdminMode."
    REFERENCE
```

```

        "IEEE Std 802.3, 30.3.3.6"
 ::= { dot3PFCEnt 2 }

dot3HCInPFCFrames OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of MAC Control frames received on this
        interface with an opcode indicating the PFC
        operation."
 ::= { dot3PFCEnt 3 }

dot3HCOuPFCFrames OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "A count of MAC Control frames transmitted on
        this interface with an opcode indicating the
        PFC operation."
 ::= { dot3PFCEnt 4 }

etherConformance OBJECT IDENTIFIER
 ::= { ieee8023etherMIB 2 }

etherGroups OBJECT IDENTIFIER
 ::= { etherConformance 1 }

etherCompliances OBJECT IDENTIFIER
 ::= { etherConformance 2 }

etherCollisionTableGroup OBJECT-GROUP
    OBJECTS      { dot3CollFrequencies }
    STATUS      current
    DESCRIPTION
        "A collection of objects providing a histogram
        of packets successfully transmitted after
        experiencing exactly N collisions."
 ::= { etherGroups 1 }

etherStatsLowSpeedGroup OBJECT-GROUP
    OBJECTS      { dot3StatsSQETestErrors }
    STATUS      current
    DESCRIPTION
        "A collection of objects providing information
        applicable to Ethernet-like network interfaces
        capable of operating at 10 Mb/s or slower in
        half-duplex mode."
 ::= { etherGroups 2 }

etherStatsHighSpeedGroup OBJECT-GROUP
    OBJECTS      { dot3StatsSymbolErrors }
    STATUS      current

```

#### DESCRIPTION

```
"A collection of objects providing information
applicable to Ethernet-like network interfaces
capable of operating at 100 Mb/s or faster."
::= { etherGroups 3 }
```

```
etherDuplexGroup OBJECT-GROUP
OBJECTS      { dot3StatsDuplexStatus }
STATUS       current
DESCRIPTION
  "A collection of objects providing information
  about the duplex mode of an Ethernet-like
  network interface."
::= { etherGroups 4 }
```

```
etherControlGroup OBJECT-GROUP
OBJECTS      { dot3ControlFunctionsSupported,
              dot3ControlInUnknownOpcodes }
STATUS       current
DESCRIPTION
  "A collection of objects providing information
  about the MAC Control sublayer on Ethernet-like
  network interfaces."
::= { etherGroups 5 }
```

```
etherControlPauseGroup OBJECT-GROUP
OBJECTS      { dot3PauseAdminMode, dot3PauseOperMode,
              dot3InPauseFrames, dot3OutPauseFrames }
STATUS       current
DESCRIPTION
  "A collection of objects providing information
  about and control of the MAC Control PAUSE
  function on Ethernet-like network interfaces."
::= { etherGroups 6 }
```

```
etherStatsBaseGroup2 OBJECT-GROUP
OBJECTS      { dot3StatsAlignmentErrors, dot3StatsFCSErrors,
              dot3StatsInternalMacTransmitErrors,
              dot3StatsFrameTooLongs,
              dot3StatsInternalMacReceiveErrors,
              dot3StatsMaxFrameLength }
STATUS       current
DESCRIPTION
  "A collection of objects providing information
  applicable to all Ethernet-like network
  interfaces."
::= { etherGroups 7 }
```

```
etherStatsHalfDuplexGroup OBJECT-GROUP
OBJECTS      { dot3StatsSingleCollisionFrames,
              dot3StatsMultipleCollisionFrames,
              dot3StatsDeferredTransmissions,
              dot3StatsLateCollisions, dot3StatsExcessiveCollisions,
              dot3StatsCarrierSenseErrors }
```



```

STATUS      current
DESCRIPTION
    "A collection of objects providing information
    applicable only to half-duplex Ethernet-like
    network interfaces."
::= { etherGroups 8 }

etherHCStatsGroup OBJECT-GROUP
OBJECTS      { dot3HCStatsAlignmentErrors, dot3HCStatsFCSErrors,
              dot3HCStatsInternalMacTransmitErrors,
              dot3HCStatsFrameTooLongs,
              dot3HCStatsInternalMacReceiveErrors,
              dot3HCStatsSymbolErrors }
STATUS      current
DESCRIPTION
    "A collection of objects providing high-capacity
    statistics applicable to higher-speed
    Ethernet-like network interfaces."
::= { etherGroups 9 }

etherHCControlGroup OBJECT-GROUP
OBJECTS      { dot3HCControlInUnknownOpCodes }
STATUS      current
DESCRIPTION
    "A collection of objects providing high-capacity
    statistics for the MAC Control sublayer on
    higher-speed Ethernet-like network interfaces."
::= { etherGroups 10 }

etherHCControlPauseGroup OBJECT-GROUP
OBJECTS      { dot3HCInPauseFrames, dot3HCOutPauseFrames }
STATUS      current
DESCRIPTION
    "A collection of objects providing high-capacity
    statistics for the MAC Control PAUSE function on
    higher-speed Ethernet-like network interfaces."
::= { etherGroups 11 }

etherRateControlGroup OBJECT-GROUP
OBJECTS      { dot3StatsRateControlAbility,
              dot3StatsRateControlStatus }
STATUS      current
DESCRIPTION
    "A collection of objects providing information
    about the Rate Control function on Ethernet-like
    interfaces."
::= { etherGroups 12 }

etherHCStatsLpiGroup OBJECT-GROUP
OBJECTS      { dot3HCStatsTransmitLPIMicroseconds,
              dot3HCStatsReceiveLPIMicroseconds,
              dot3HCStatsTransmitLPITransitions,
              dot3HCStatsReceiveLPITransitions }
STATUS      current

```



#### DESCRIPTION

"A collection of objects providing information about the Low Power Idle function on Ethernet-like interfaces."

```
::= { etherGroups 13 }
```

etherSlowProtocolsGroup OBJECT-GROUP

```
OBJECTS      { dot3SlowProtocolFrameLimit }
```

```
STATUS       current
```

```
DESCRIPTION
```

"An object providing control and information about the frame transmission rate limit for Slow Protocols on Ethernet-like interfaces."

```
::= { etherGroups 14 }
```

etherExtensionMacCtrlGroup OBJECT-GROUP

```
OBJECTS      { dot3HCInExtensionFrames, dot3HCOutExtensionFrames,  
              dot3ExtensionMacCtrlAdmin }
```

```
STATUS       current
```

```
DESCRIPTION
```

"A collection of objects providing information about the Extension MAC Control function on Ethernet-like interfaces."

```
::= { etherGroups 15 }
```

etherPfcGroup OBJECT-GROUP

```
OBJECTS      { dot3PFCAdminMode, dot3PFCOperMode, dot3HCInPFCFrames,  
              dot3HCOutPFCFrames }
```

```
STATUS       current
```

```
DESCRIPTION
```

"A collection of objects providing information about the Priority Flow Control function on Ethernet-like interfaces."

```
::= { etherGroups 16 }
```

dot3Compliance2 MODULE-COMPLIANCE

```
STATUS       current
```

```
DESCRIPTION
```

"The compliance statement for managed network entities which have Ethernet-like network interfaces.

Note that compliance with this MIB module requires compliance with the ifCompliance3 MODULE-COMPLIANCE statement of the IF-MIB (IETF RFC 2863). In addition, compliance with this MIB module requires compliance with the mauModIfCompl3 MODULE-COMPLIANCE statement of the MAU-MIB module defined in Clause 13."

```
MODULE       -- this module
```

```
MANDATORY-GROUPS      { etherStatsBaseGroup2 }
```



GROUP etherDuplexGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces which are capable of operating in full-duplex mode. It is highly recommended for all Ethernet-like network interfaces."

GROUP etherRateControlGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces which are capable of operating at speeds faster than 1000 Mb/s. It is highly recommended for all Ethernet-like network interfaces."

GROUP etherStatsLowSpeedGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces which are capable of operating at 10 Mb/s or slower in half-duplex mode."

GROUP etherStatsHighSpeedGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces which are capable of operating at 100 Mb/s or faster."

GROUP etherStatsHalfDuplexGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces which are capable of operating in half-duplex mode."

GROUP etherHCStatsGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces which are capable of operating at 10 Gb/s or faster. It is recommended for all Ethernet-like network interfaces which are capable of operating at 1000 Mb/s or faster."

GROUP etherControlGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that support the MAC Control sublayer."

GROUP etherHCControlGroup

DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that

support the MAC Control sublayer and are capable of operating at 10 Gb/s or faster."

GROUP etherControlPauseGroup  
DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that support the MAC Control PAUSE function."

GROUP etherHCControlPauseGroup  
DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that support the MAC Control PAUSE function and are capable of operating at 10 Gb/s or faster."

GROUP etherCollisionTableGroup  
DESCRIPTION

"This group is optional. It is appropriate for all Ethernet-like network interfaces which are capable of operating in half-duplex mode and have the necessary metering. Implementation in systems with such interfaces is highly recommended."

GROUP etherHCStatsLpiGroup  
DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that support the Low Power Idle function."

GROUP etherSlowProtocolsGroup  
DESCRIPTION

"This group is optional. It is appropriate for Ethernet-like network interfaces that implement OAM as defined in Clause 57 of IEEE Std 802.3."

GROUP etherExtensionMacCtrlGroup  
DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that implement Extension MAC Control."

GROUP etherPfcGroup  
DESCRIPTION

"This group is mandatory for all Ethernet-like network interfaces that implement Priority Flow Control."

::= { etherCompliances 1 }

END -- end of module IEEE8023-EtherLike-MIB.  
IEEE8023-MAU-MIB DEFINITIONS ::= BEGIN

IMPORTS

```
IANAifJackType, IANAifMauAutoNegCapBits, IANAifMauMediaAvailable,  
IANAifMauTypeListBits  
    FROM IANA-MAU-MIB  
InterfaceIndex  
    FROM IF-MIB  
MODULE-COMPLIANCE, NOTIFICATION-GROUP, OBJECT-GROUP  
    FROM SNMPv2-CONF  
Counter32, Counter64, Integer32, MODULE-IDENTITY, NOTIFICATION-TYPE,  
OBJECT-TYPE, Unsigned32, org  
    FROM SNMPv2-SMI  
AutonomousType, TruthValue  
    FROM SNMPv2-TC;
```

ieee8023mauMIB MODULE-IDENTITY

LAST-UPDATED "202307310000Z"

ORGANIZATION

"IEEE 802.3 Working Group"

CONTACT-INFO

" WG-URL: <http://www.ieee802.org/3/index.html>

WG-EMail: <mailto:stds-802-3-dialog@ieee.org>

Contact: IEEE 802.3 Working Group Chair

Postal: C/O IEEE 802.3 Working Group

IEEE Standards Association

445 Hoes Lane

Piscataway, NJ 08854

USA

E-mail: <mailto:stds-802-3-dialog@ieee.org>"

DESCRIPTION

"Management information for 802.3 MAUs."

REVISION "202307310000Z"

DESCRIPTION

"Revision, based on an earlier version in IEEE Std 802.3.1-2013  
addressing changes from IEEE Std 802.3 revisions 2012, 2015,

2018,

and 2022."

REVISION "201304110000Z"

DESCRIPTION

"Revision, based on an earlier version in IEEE Std 802.3.1-2011."

REVISION "201102020000Z"

DESCRIPTION

"Initial version, based on an earlier version published  
as RFC 4836."

```
::= { org ieee(111) standards-association-numbers-series-standards(2)  
lan-man-stds(802) ieee802dot3(3) ieee802dot3dot1mibs(1) 13 }
```

ieee8023snmpDot3MauMgt OBJECT IDENTIFIER

```
::= { ieee8023mauMIB 1 }
```

snmpDot3MauTraps OBJECT IDENTIFIER

```
::= { ieee8023snmpDot3MauMgt 0 }
```

dot3RpMauBasicGroup OBJECT IDENTIFIER

```
::= { ieee8023snmpDot3MauMgt 1 }
```

rpMauTable OBJECT-TYPE

SYNTAX SEQUENCE OF RpMauEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"Table of descriptive and status information about the MAU(s) attached to the ports of a repeater."

```
::= { dot3RpMauBasicGroup 1 }
```

rpMauEntry OBJECT-TYPE

SYNTAX RpMauEntry

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"An entry in the table, containing information about a single MAU."

INDEX { rpMauGroupIndex, rpMauPortIndex, rpMauIndex }

```
::= { rpMauTable 1 }
```

RpMauEntry ::= SEQUENCE {

rpMauGroupIndex	Integer32,
rpMauPortIndex	Integer32,
rpMauIndex	Integer32,
rpMauType	AutonomousType,
rpMauStatus	INTEGER,
rpMauMediaAvailable	IANAifMauMediaAvailable,
rpMauMediaAvailableStateExits	Counter32,
rpMauJabberState	INTEGER,
rpMauJabberingStateEnters	Counter32,
rpMauFalseCarriers	Counter32

}

rpMauGroupIndex OBJECT-TYPE

SYNTAX Integer32 (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This variable uniquely identifies the group containing the port to which the MAU described by this entry is connected.

Note: In practice, a group will generally be a field-replaceable unit (i.e., module, card, or board) that can fit in the physical system enclosure, and the group number will correspond to a number marked on the physical enclosure.

The group denoted by a particular value of this object is the same as the group denoted by the same value of rpMauGroupIndex."



## REFERENCE

"RFC 2108, rpMauGroupIndex."  
 ::= { rpMauEntry 1 }

rpMauPortIndex OBJECT-TYPE

SYNTAX Integer32 (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This variable uniquely identifies the repeater port within group rpMauGroupIndex to which the MAU described by this entry is connected."

REFERENCE

"RFC 2108, rpMauPortIndex."  
 ::= { rpMauEntry 2 }

rpMauIndex OBJECT-TYPE

SYNTAX Integer32 (1..2147483647)

MAX-ACCESS not-accessible

STATUS current

DESCRIPTION

"This variable uniquely identifies the MAU described by this entry from among other MAUs connected to the same port (rpMauPortIndex)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.1"  
 ::= { rpMauEntry 3 }

rpMauType OBJECT-TYPE

SYNTAX AutonomousType

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This object identifies the MAU type. Values for standard IEEE 802.3 MAU types are defined in the IANA maintained IANA-MAU-MIB module, as OBJECT-IDENTITIES of dot3MauType. If the MAU type is unknown, the object identifier zeroDotZero is returned."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.2"  
 ::= { rpMauEntry 4 }

rpMauStatus OBJECT-TYPE

SYNTAX INTEGER { other(1), unknown(2), operational(3),  
 standby(4), shutdown(5), reset(6) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The current state of the MAU. This object may be implemented as a read-only object by those agents and MAUs that do not implement software control of the MAU state. Some agents may not

support setting the value of this object to some of the enumerated values.

The value other(1) is returned if the MAU is in a state other than one of the states 2 through 6.

The value unknown(2) is returned when the MAU's true state is unknown; for example, when it is being initialized.

A MAU in the operational(3) state is fully functional; it operates, and passes signals to its attached DTE or repeater port in accordance to its specification.

A MAU in standby(4) state forces DI and CI to idle, and the media transmitter to idle or fault, if supported. Standby(4) mode only applies to link type MAUs. The state of rpMauMediaAvailable is unaffected.

A MAU in shutdown(5) state assumes the same condition on DI, CI, and the media transmitter, as though it were powered down or not connected. The MAU may return other(1) value for the rpMauJabberState and rpMauMediaAvailable objects when it is in this state. For an AUI, this state will remove power from the AUI.

Setting this variable to the value reset(6) resets the MAU in the same manner as a power-off, power-on cycle of at least one-half second would. The agent is not required to return the value reset(6).

Setting this variable to the value operational(3), standby(4), or shutdown(5) causes the MAU to assume the respective state, except that setting a mixing-type MAU or an AUI to standby(4) will cause the MAU to enter the shutdown state."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.7, 30.5.1.2.2, and 30.5.1.2.1"  
 ::= { rpMauEntry 5 }

rpMauMediaAvailable OBJECT-TYPE

SYNTAX IANAifMauMediaAvailable  
MAX-ACCESS read-only  
STATUS current

DESCRIPTION

"This object identifies Media Available state of the MAU, complementary to the rpMauStatus. Values for the standard IEEE 802.3 Media Available states are defined in the IANA maintained IANA-MAU-MIB

```
    module, as IANAifMauMediaAvailable TC."
REFERENCE
    "IEEE Std 802.3, 30.5.1.1.4, aMediaAvailable."
 ::= { rpMauEntry 6 }
```

rpMauMediaAvailableStateExits OBJECT-TYPE

```
SYNTAX      Counter32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "A count of the number of times that
    * rpMauMediaAvailable for this MAU instance leaves
    the state available(3).
```

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of rpPtrMonitorPortLastChange."

```
REFERENCE
    "IEEE Std 802.3, 30.5.1.1.5
    RFC 2108, rpPtrMonitorPortLastChange"
 ::= { rpMauEntry 7 }
```

rpMauJabberState OBJECT-TYPE

```
SYNTAX      INTEGER { other(1), unknown(2), noJabber(3),
                    jabbering(4) }
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
```

"The value other(1) is returned if the jabber state is not 2, 3, or 4. The agent shall return other(1) for MAU type dot3MauTypeAUI.

The value unknown(2) is returned when the MAU's true state is unknown; for example, when it is being initialized.

If the MAU is not jabbering the agent returns noJabber(3). This is the 'normal' state.

If the MAU is in jabber state the agent returns the jabbering(4) value."

```
REFERENCE
    "IEEE Std 802.3, 30.5.1.1.6"
 ::= { rpMauEntry 8 }
```

rpMauJabberingStateEnters OBJECT-TYPE

```
SYNTAX      Counter32
MAX-ACCESS  read-only
STATUS      current
DESCRIPTION
    "A count of the number of times that
    mauJabberState for this MAU instance enters the
    state jabbering(4). For MAUs of type *
```

dot3MauTypeAUI, dot3MauType100BaseT4, dot3MauType100BaseTX, dot3MauType100BaseFX, and all 1000 Mb/s types, this counter will indicate zero.

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of rptrMonitorPortLastChange."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.6,  
RFC 2108, rptrMonitorPortLastChange"  
::= { rpMauEntry 9 }

rpMauFalseCarriers OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of the number of false carrier events during IDLE in 100BASE-X links. This counter does not increment at the symbol rate. It can increment after a valid carrier completion at a maximum rate of once per 100 ms until the next carrier event.

This counter increments only for MAUs of type dot3MauType100BaseT4, dot3MauType100BaseTX, dot3MauType100BaseFX, and all 1000 Mb/s types.

For all other MAU types, this counter will indicate zero.

The approximate minimum time for rollover of this counter is 7.4 hours.

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of rptrMonitorPortLastChange."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.10,  
RFC 2108, rptrMonitorPortLastChange"  
::= { rpMauEntry 10 }

rpJackTable OBJECT-TYPE

SYNTAX SEQUENCE OF RpJackEntry  
MAX-ACCESS not-accessible  
STATUS current  
DESCRIPTION

"Information about the external jacks attached to MAUs attached to the ports of a repeater."  
::= { dot3RpMauBasicGroup 2 }





```
rpJackEntry OBJECT-TYPE
    SYNTAX      RpJackEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry in the table, containing information
         about a particular jack."
    INDEX       { rpMauGroupIndex, rpMauPortIndex, rpMauIndex,
                 rpJackIndex }
    ::= { rpJackTable 1 }
```

```
RpJackEntry ::= SEQUENCE {
    rpJackIndex      Integer32,
    rpJackType       IANAifJackType
}
```

```
rpJackIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This variable uniquely identifies the jack
         described by this entry from among other jacks
         attached to the same MAU (rpMauIndex)."
    ::= { rpJackEntry 1 }
```

```
rpJackType OBJECT-TYPE
    SYNTAX      IANAifJackType
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The jack connector type, as it appears on the
         outside of the system."
    ::= { rpJackEntry 2 }
```

```
dot3IfMauBasicGroup OBJECT IDENTIFIER
    ::= { ieee8023snmpDot3MauMgt 2 }
```

```
ifMauTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF IfMauEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Table of descriptive and status information
         about MAU(s) attached to an interface."
    ::= { dot3IfMauBasicGroup 1 }
```

```
ifMauEntry OBJECT-TYPE
    SYNTAX      IfMauEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry in the table, containing information
         about a single MAU."
    ::= { ifMauTable 1 }
```

```
INDEX      { ifMauIfIndex, ifMauIndex }
 ::= { ifMauTable 1 }
```

```
IfMauEntry ::= SEQUENCE {
    ifMauIfIndex      InterfaceIndex,
    ifMauIndex        Integer32,
    ifMauType         AutonomousType,
    ifMauStatus       INTEGER,
    ifMauMediaAvailable IANAifMauMediaAvailable,
    ifMauMediaAvailableStateExits Counter32,
    ifMauJabberState  INTEGER,
    ifMauJabberingStateEnters Counter32,
    ifMauFalseCarriers Counter32,
    ifMauDefaultType  AutonomousType,
    ifMauAutoNegSupported TruthValue,
    ifMauTypeListBits IANAifMauTypeListBits,
    ifMauHCFALSECarriers Counter64,
    ifMauPCSCodingViolations Counter64,
    ifMauFECAbility    INTEGER,
    ifMauFECMode       INTEGER,
    ifMauFECCorrectedBlocks Counter64,
    ifMauFECUnCorrectableBlocks Counter64,
    ifMauSNROpMarginChn1A Integer32,
    ifMauSNROpMarginChn1B Integer32,
    ifMauSNROpMarginChn1C Integer32,
    ifMauSNROpMarginChn1D Integer32,
    ifMauEEESupportList IANAifMauTypeListBits,
    ifMauEEELDFastRetrainCount Counter32,
    ifMauEEELPFastRetrainCount Counter32,
    ifMauTimeSyncCapabilityTX TruthValue,
    ifMauTimeSyncCapabilityRX TruthValue,
    ifMauTimeSyncDelayTXmax Integer32,
    ifMauTimeSyncDelayTXmin Integer32,
    ifMauTimeSyncDelayRXmax Integer32,
    ifMauTimeSyncDelayRXmin Integer32
}
```

```
ifMauIfIndex OBJECT-TYPE
    SYNTAX      InterfaceIndex
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This variable uniquely identifies the interface
         to which the MAU described by this entry is
         connected."
    REFERENCE
        "RFC 2863, ifIndex"
 ::= { ifMauEntry 1 }
```

```
ifMauIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
```

"This variable uniquely identifies the MAU described by this entry from among other MAUs connected to the same interface (ifMauIfIndex)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.1"

::= { ifMauEntry 2 }

ifMauType OBJECT-TYPE

SYNTAX AutonomousType

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This object identifies the MAU type. Values for standard IEEE 802.3 MAU types are defined in the IANA maintained IANA-MAU-MIB module, as OBJECT-IDENTITIES of dot3MauType. If the MAU type is unknown, the object identifier zeroDotZero is returned.

This object represents the operational type of the MAU, as determined by either 1) the result of the Auto-Negotiation function or 2) if Auto-Negotiation is not enabled or is not implemented for this MAU, by the value of the object ifMauDefaultType. In case 2), a set to the object ifMauDefaultType will force the MAU into the new operating mode."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.2"

::= { ifMauEntry 3 }

ifMauStatus OBJECT-TYPE

SYNTAX INTEGER { other(1), unknown(2), operational(3), standby(4), shutdown(5), reset(6) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"The current state of the MAU. This object may be implemented as a read-only object by those agents and MAUs that do not implement software control of the MAU state. Some agents may not support setting the value of this object to some of the enumerated values.

The value other(1) is returned if the MAU is in a state other than one of the states 2 through 6.

The value unknown(2) is returned when the MAU's true state is unknown; for example, when it is being initialized.

A MAU in the operational(3) state is fully functional; it operates, and passes signals to its

attached DTE or repeater port in accordance to its specification.

A MAU in standby(4) state forces DI and CI to idle and the media transmitter to idle or fault, if supported. Standby(4) mode only applies to link type MAUs. The state of ifMauMediaAvailable is unaffected.

A MAU in shutdown(5) state assumes the same condition on DI, CI, and the media transmitter, as though it were powered down or not connected. The MAU may return other(1) value for the ifMauJabberState and ifMauMediaAvailable objects when it is in this state. For an AUI, this state will remove power from the AUI.

Setting this variable to the value reset(6) resets the MAU in the same manner as a power-off, power-on cycle of at least one-half second would. The agent is not required to return the value reset(6).

Setting this variable to the value operational(3), standby(4), or shutdown(5) causes the MAU to assume the respective state, except that setting a mixing-type MAU or an AUI to standby(4) will cause the MAU to enter the shutdown state."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.7, 30.5.1.2.2, and 30.5.1.2.1"  
::= { ifMauEntry 4 }

ifMauMediaAvailable OBJECT-TYPE

SYNTAX IANAifMauMediaAvailable  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"This object identifies Media Available state of the MAU, complementary to the ifMauStatus. Values for the standard IEEE 802.3 Media Available states are defined in the IANA maintained IANA-MAU-MIB module, as IANAifMauMediaAvailable TC."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.4"  
::= { ifMauEntry 5 }

ifMauMediaAvailableStateExits OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of the number of times that ifMauMediaAvailable for this MAU instance leaves

the state available(3).

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of ifCounterDiscontinuityTime."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.5,  
RFC 2863, ifCounterDiscontinuityTime."

::= { ifMauEntry 6 }

ifMauJabberState OBJECT-TYPE

SYNTAX INTEGER { other(1), unknown(2), noJabber(3),  
jabbering(4) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The value other(1) is returned if the jabber state is not 2, 3, or 4. The agent shall return other(1) for MAU type dot3MauTypeAUI.

The value unknown(2) is returned when the MAU's true state is unknown; for example, when it is being initialized.

If the MAU is not jabbering the agent returns noJabber(3). This is the 'normal' state.

If the MAU is in jabber state the agent returns the jabbering(4) value."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.6"

::= { ifMauEntry 7 }

ifMauJabberingStateEnters OBJECT-TYPE

SYNTAX Counter32

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A count of the number of times that mauJabberState for this MAU instance enters the state jabbering(4). This counter will indicate zero for MAUs of type dot3MauTypeAUI and those of speeds above 10 Mb/s.

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of ifCounterDiscontinuityTime."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.6,  
RFC 2863, ifCounterDiscontinuityTime."

::= { ifMauEntry 8 }



#### ifMauFalseCarriers OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A count of the number of false carrier events during IDLE in 100BASE-X and 1000BASE-X links.

For all other MAU types, this counter will indicate zero. This counter does not increment at the symbol rate.

It can increment after a valid carrier completion at a maximum rate of once per 100 ms for 100BASE-X and once per 10us for 1000BASE-X until the next CarrierEvent.

This counter can roll over very quickly. A management station is advised to poll the ifMauHCFALSECarriers instead of this counter in order to avoid loss of information.

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of ifCounterDiscontinuityTime."

#### REFERENCE

"IEEE Std 802.3, 30.5.1.1.10,  
RFC 2863, ifCounterDiscontinuityTime."  
::= { ifMauEntry 9 }

#### ifMauDefaultType OBJECT-TYPE

SYNTAX AutonomousType  
MAX-ACCESS read-write  
STATUS current  
DESCRIPTION

"This object identifies the default administrative baseband MAU type to be used in conjunction with the operational MAU type denoted by ifMauType.

The set of possible values for this object is the same as the set defined for the ifMauType object.

This object represents the administratively-configured type of the MAU. If Auto-Negotiation is not enabled or is not implemented for this MAU, the value of this object determines the operational type of the MAU. In this case, a set to this object will force the MAU into the specified operating mode.

If Auto-Negotiation is implemented and enabled

for this MAU, the operational type of the MAU is determined by Auto-Negotiation, and the value of this object denotes the type to which the MAU will automatically revert if/when Auto-Negotiation is later disabled.

It may be necessary to provide for underlying hardware implementations which do not follow the exact behavior specified above.

In particular, when ifMauAutoNegAdminStatus transitions from enabled to disabled, the agent implementation shall verify that the operational type of the MAU (as reported by ifMauType) correctly transitions to the value specified by this object, rather than continuing to operate at the value earlier determined by the Auto-Negotiation function."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.1, and 22.2.4.1.4"  
::= { ifMauEntry 10 }

ifMauAutoNegSupported OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This object indicates whether or not Auto-Negotiation is supported on this MAU."  
::= { ifMauEntry 11 }

ifMauTypeListBits OBJECT-TYPE

SYNTAX IANAifMauTypeListBits

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A value that uniquely identifies the set of possible IEEE 802.3 types that the MAU could be. If Auto-Negotiation is present on this MAU, this object maps to ifMauAutoNegCapabilityBits.

Note that this MAU may be capable of operating as a MAU type that is beyond the scope of this MIB. This is indicated by returning the bit value bOther in addition to any bit values for standard capabilities that are listed in the IANAifMauTypeListBits TC."

::= { ifMauEntry 12 }

ifMauHCFALSECarriers OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A count of the number of false carrier events during IDLE in 100BASE-X and 1000BASE-X links."

For all other MAU types, this counter will indicate zero. This counter does not increment at the symbol rate.

This counter is a 64-bit version of ifMauFalseCarriers. Since the 32-bit version of this counter can roll over very quickly, management stations are advised to poll the 64-bit version instead, in order to avoid loss of information.

Discontinuities in the value of this counter can occur at re-initialization of the management system and at other times, as indicated by the value of ifCounterDiscontinuityTime."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.10,  
RFC 2863, ifCounterDiscontinuityTime."

::= { ifMauEntry 13 }

ifMauPCSCodingViolations OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"Generalized nonresettable counter. This counter has a maximum increment rate of 25 000 000 counts per second for 100 Mb/s implementations and 125 000 000 counts per second for 1000 Mb/s implementations.

For 100 Mb/s operation it is a count of the number of events that cause the PHY to indicate 'Data reception with errors' on the MII (see IEEE Std 802.3, Table 22-2).

For 1000 Mb/s operation it is a count of the number of events that cause the PHY to indicate 'Data reception error' or 'Carrier Extend Error' on the GMII (see IEEE Std 802.3, Table 35-2). The contents of this attribute is undefined when FEC is operating."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.14"

::= { ifMauEntry 14 }

ifMauFECAbility OBJECT-TYPE

SYNTAX INTEGER { unknown(1), supported(2), notsupported(3) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A read-only value that indicates if the PHY supports an optional FEC sublayer for forward error correction (see IEEE Std 802.3, 65.2



and IEEE Std 802.3, Clause 74, Clause 91, and Clause 108).

If an IEEE Std 802.3, Clause 45 MDIO Interface to the PCS is present, then this attribute will map to the FEC capability register (see IEEE Std 802.3, 45.2.10.2 or 45.2.1.107)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.15"  
 ::= { ifMauEntry 15 }

ifMauFECMode OBJECT-TYPE

SYNTAX INTEGER { unknown(1), disabled(2), enabled(3),  
 baseREnabled(4), rsFecEnabled(5) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"A read-write value that indicates the mode of operation of the optional FEC sublayer for forward error correction (see IEEE Std 802.3, 65.2 and IEEE Std 802.3, Clause 74, Clause 91, and clause 108).

A GET operation returns the current mode of operation of the PHY. A SET operation changes the mode of operation of the PHY to the indicated value. The enumerations 'baseREnabled' and 'rsFecEnabled' are only used for 25GBASE-CR, 25GBASE-CR-S, 25GBASE-KR, and 25GBASE-KR-S PHYs where operation in the no-FEC mode maps to the enumeration 'disabled', operation in the BASE-R FEC mode maps to the enumeration 'baseREnabled', and operation in the RS-FEC mode maps to the enumeration 'rsFecEnabled' (see IEEE Std 802.3, 110.6 and 111.6).

If an IEEE Std 802.3, Clause 45 MDIO Interface is present, this attribute maps to the FEC enable bit or to the RS-FEC enable bit in the appropriate FEC control register based upon the PHY type and the FEC operating mode (see IEEE Std 802.3, 45.2.10.3, 45.2.1.108, and 45.2.1.116)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.16"  
 ::= { ifMauEntry 16 }

ifMauFECCorrectedBlocks OBJECT-TYPE

SYNTAX Counter64

MAX-ACCESS read-only

STATUS deprecated

DESCRIPTION

\*\*\*\*\* THIS OBJECT IS DEPRECATED \*\*\*\*\*

Generalized nonresettable counter. This counter has a maximum increment rate of 1 200 000 counts per second for 1000 Mb/s implementations, and 5 000 000 counts per second for 10 Gb/s implementations.



For 1000BASE-PX PHYs or 10GBASE-R PHYs, a count of corrected FEC blocks. This counter will not increment for other PHY types. Increment the counter by one for each received block that is corrected by the FEC function in the PHY. If IEEE Std 802.3, Clause 45 MDIO Interface to the PCS is present, then this object maps to the FEC corrected blocks counter (see IEEE Std 802.3, 45.2.8.5 and 45.2.1.91)"

REFERENCE

"IEEE Std 802.3, 30.5.1.1.17"  
 ::= { ifMauEntry 17 }

ifMauFECUncorrectableBlocks OBJECT-TYPE

SYNTAX Counter64  
MAX-ACCESS read-only  
STATUS deprecated  
DESCRIPTION

\*\*\*\*\* THIS OBJECT IS DEPRECATED \*\*\*\*\*

Generalized nonresettable counter. This counter has a maximum increment rate of 1 200 000 counts per second for 1000 Mb/s implementations, and 5 000 000 counts per second for 10 Gb/s implementations.

For 1000BASE-PX, 10/25/40/50/100/200/400GBASE-R, 10GBASE-P, 10GBASE-PR, or 10/1GBASE-PRX PHYs, a count of uncorrectable FEC blocks. This counter will not increment for other PHY types. Increment the counter by one for each received block that is determined to be uncorrectable by the FEC function in the PHY.

If IEEE Std 802.3, Clause 45 MDIO Interface to the PCS is present, then this object maps to the FEC uncorrectable blocks counter (see IEEE Std 802.3, 45.2.8.6 and 45.2.1.92)"

REFERENCE

"IEEE Std 802.3, 30.5.1.1.18"  
 ::= { ifMauEntry 18 }

ifMauSNROpMarginChnlA OBJECT-TYPE

SYNTAX Integer32 (-127..127)  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"The current SNR operating margin measured at the slicer input for channel A for the 10GBASE-T PMA. It is reported in units of 0.1 dB to an accuracy of 0.5 dB within the range of -12.7 dB to 12.7 dB.

If an IEEE Std 802.3, Clause 45 MDIO Interface to the

PMA/PMD is present, then this attribute maps to the SNR operating margin channel A register (see IEEE Std 802.3, 45.2.1.81)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.19"

::= { ifMauEntry 19 }

ifMauSNROpMarginChnlB OBJECT-TYPE

SYNTAX Integer32 (-127..127)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The current SNR operating margin measured at the slicer input for channel B for the 10GBASE-T PMA. It is reported in units of 0.1 dB to an accuracy of 0.5 dB within the range of -12.7 dB to 12.7 dB. If an IEEE Std 802.3, Clause 45 MDIO Interface to the PMA/PMD is present, then this attribute maps to the SNR operating margin channel B register (see IEEE Std 802.3, 45.2.1.82)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.20"

::= { ifMauEntry 20 }

ifMauSNROpMarginChnlC OBJECT-TYPE

SYNTAX Integer32 (-127..127)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The current SNR operating margin measured at the slicer input for channel C for the 10GBASE-T PMA. It is reported in units of 0.1 dB to an accuracy of 0.5 dB within the range of -12.7 dB to 12.7 dB. If an IEEE Std 802.3, Clause 45 MDIO Interface to the PMA/PMD is present, then this attribute maps to the SNR operating margin channel C register (see IEEE Std 802.3, 45.2.1.83)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.21"

::= { ifMauEntry 21 }

ifMauSNROpMarginChnlD OBJECT-TYPE

SYNTAX Integer32 (-127..127)

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"The current SNR operating margin measured at the slicer input for channel D for the 10GBASE-T PMA. It is reported in units of 0.1 dB to an accuracy of 0.5 dB within the range of -12.7 dB to 12.7 dB. If an IEEE Std 802.3, Clause 45 MDIO Interface to the PMA/PMD is present, then this attribute maps to the SNR operating margin channel D register (see IEEE Std 802.3, 45.2.1.84)."

## REFERENCE

```
"IEEE Std 802.3, 30.5.1.1.22"  
 ::= { ifMauEntry 22 }
```

ifMauEEESupportList OBJECT-TYPE

```
SYNTAX      IANAifMauTypeListBits  
MAX-ACCESS  read-only  
STATUS      current  
DESCRIPTION
```

```
"A read-only list of the possible PHY types for which  
the underlying system supports Energy-Efficient Ethernet  
(EEE) as defined in IEEE Std 802.3, Clause 78.  
If IEEE Std 802.3, Clause 28 or Clause 73 Auto-Negotiation  
Is present, then this attribute maps to the local  
technology ability or advertised ability of the local  
device "
```

## REFERENCE

```
"IEEE Std 802.3, 30.5.1.1.23"  
 ::= { ifMauEntry 23 }
```

ifMauEEELDFastRetrainCount OBJECT-TYPE

```
SYNTAX      Counter32  
MAX-ACCESS  read-only  
STATUS      current  
DESCRIPTION
```

```
"A count of the number of fast retrains initiated by the  
local device. This counter can be derived from  
fr_tx_counter (see IEEE Std 802.3, 55.4.5.4, 113.4.5.4,  
and 126.4.5.4). If IEEE Std 802.3, Clause 45 MDIO  
Interface to the PMA/PMD is present, then this attribute  
Can be derived from the LD fast retrain count register (see  
IEEE Std 802.3, 45.2.1.94.2)."
```

## REFERENCE

```
"IEEE Std 802.3, 30.5.1.1.24"  
 ::= { ifMauEntry 24 }
```

ifMauEEELPFastRetrainCount OBJECT-TYPE

```
SYNTAX      Counter32  
MAX-ACCESS  read-only  
STATUS      current  
DESCRIPTION
```

```
"A count of the number of fast retrains initiated by the  
link partner. This counter can be derived from  
fr_rx_counter (see IEEE Std 802.3, 55.4.5.4, 113.4.5.4,  
and 126.4.5.4). If IEEE Std 802.3, Clause 45 MDIO  
Interface to the PMA/PMD is present, then this attribute  
Can be derived from the LP fast retrain count register (see  
IEEE Std 802.3, 45.2.1.94.1)."
```

## REFERENCE

```
"IEEE Std 802.3, 30.5.1.1.25"  
 ::= { ifMauEntry 25 }
```

ifMauTimeSyncCapabilityTX OBJECT-TYPE

```
SYNTAX      TruthValue
```



```
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object indicates whether or not transmit
    Time Sync is supported on this MAU."
REFERENCE
    "IEEE Std 802.3, 30.13.1.1"
 ::= { ifMauEntry 26 }
```

```
ifMauTimeSyncCapabilityRX OBJECT-TYPE
SYNTAX TruthValue
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "This object indicates whether or not receive
    Time Sync is supported on this MAU."
REFERENCE
    "IEEE Std 802.3, 30.13.1.2"
 ::= { ifMauEntry 27 }
```

```
ifMauTimeSyncDelayTXmax OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "The maximum data delay as specified in IEEE Std 802.3,
    90.7, expressed in units of ns.

    If an IEEE Std 802.3, Clause 45 MDIO Interface to
    PMA/PMD, WIS, PCS, PHY XS, DTE XS and/or TC is
    present, then the value stored in this attribute
    represents the maximum transmit path data delay
    values, consisting of the sum of the values of the
    registers in the instantiated sublayers (for each MMD,
    in case of multiple instances)"
REFERENCE
    "IEEE Std 802.3, 30.13.1.3"
 ::= { ifMauEntry 28 }
```

```
ifMauTimeSyncDelayTXmin OBJECT-TYPE
SYNTAX Integer32
MAX-ACCESS read-only
STATUS current
DESCRIPTION
    "The minimum data delay as specified in IEEE Std 802.3,
    90.7, expressed in units of ns.

    If an IEEE Std 802.3, Clause 45 MDIO Interface to
    PMA/PMD, WIS, PCS, PHY XS, DTE XS and/or TC is
    present, then the value stored in this attribute
    represents the minimum transmit path data delay
    values, consisting of the sum of the values of the
    registers in the instantiated sublayers (for each MMD,
    in case of multiple instances)"
```



## REFERENCE

```
"IEEE Std 802.3, 30.13.1.4"  
 ::= { ifMauEntry 29 }
```

ifMauTimeSyncDelayRXmax OBJECT-TYPE

```
SYNTAX      Integer32  
MAX-ACCESS  read-only  
STATUS      current  
DESCRIPTION
```

```
"The maximum data delay as specified in IEEE Std 802.3,  
90.7, expressed in units of ns.
```

```
If an IEEE Std 802.3, Clause 45 MDIO Interface to  
PMA/PMD, WIS, PCS, PHY XS, DTE XS and/or TC is  
present, then the value stored in this attribute  
represents the maximum receive path data delay  
values, consisting of the sum of the values of the  
registers in the instantiated sublayers (for each MMD,  
in case of multiple instances)"
```

REFERENCE

```
"IEEE Std 802.3, 30.13.1.5"  
 ::= { ifMauEntry 30 }
```

ifMauTimeSyncDelayRXmin OBJECT-TYPE

```
SYNTAX      Integer32  
MAX-ACCESS  read-only  
STATUS      current  
DESCRIPTION
```

```
"The minimum data delay as specified in IEEE Std 802.3,  
90.7, expressed in units of ns.
```

```
If an IEEE Std 802.3, Clause 45 MDIO Interface to  
PMA/PMD, WIS, PCS, PHY XS, DTE XS and/or TC is  
present, then the value stored in this attribute  
represents the minimum receive path data delay  
values, consisting of the sum of the values of the  
registers in the instantiated sublayers (for each MMD,  
in case of multiple instances)"
```

REFERENCE

```
"IEEE Std 802.3, 30.13.1.6"  
 ::= { ifMauEntry 31 }
```

ifJackTable OBJECT-TYPE

```
SYNTAX      SEQUENCE OF IfJackEntry  
MAX-ACCESS  not-accessible  
STATUS      current  
DESCRIPTION
```

```
"Information about the external jacks attached  
to MAUs attached to an interface."
```

```
 ::= { dot3IfMauBasicGroup 2 }
```

ifJackEntry OBJECT-TYPE

```
SYNTAX      IfJackEntry  
MAX-ACCESS  not-accessible
```

```

STATUS      current
DESCRIPTION
    "An entry in the table, containing information
    about a particular jack."
INDEX       { ifMauIfIndex, ifMauIndex, ifJackIndex }
 ::= { ifJackTable 1 }

IfJackEntry ::= SEQUENCE {
    ifJackIndex      Integer32,
    ifJackType       IANAifJackType
}

ifJackIndex OBJECT-TYPE
    SYNTAX      Integer32 (1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This variable uniquely identifies the jack
        described by this entry from among other jacks
        attached to the same MAU."
    ::= { ifJackEntry 1 }

ifJackType OBJECT-TYPE
    SYNTAX      IANAifJackType
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The jack connector type, as it appears on the
        outside of the system."
    ::= { ifJackEntry 2 }

ifMauPerPCSLaneStatsTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF IfMauPerPCSLaneStatsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "Table of Per-PCS lane status information
        about MAUs attached to an interface."
    ::= { dot3IfMauBasicGroup 3 }

ifMauPerPCSLaneStatsEntry OBJECT-TYPE
    SYNTAX      IfMauPerPCSLaneStatsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry in the table, containing information
        about a single PCS lane."
    INDEX       { ifMauIfIndex, ifMauIndex, ifPCSLaneIndex }
    ::= { ifMauPerPCSLaneStatsTable 1 }

IfMauPerPCSLaneStatsEntry ::= SEQUENCE {
    ifPCSLaneIndex      Unsigned32,
    ifMauPPLFECCorrectedBlocks Counter64,
    ifMauPPLFECUncorrectableBlocks Counter64,

```



```

    ifMauBIPErrorCount Counter32,
    ifMauPCStoPHYLaneMapping Unsigned32
}

ifPCSLaneIndex OBJECT-TYPE
    SYNTAX      Unsigned32 (0..255)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "This object provides the identification of the
        PCS lane for which this ifMauPerPCSLaneStatsEntry
        is applicable. This object can hold an integer value
        from 0 to N-1, where N is the total number of PCS
        lanes supported by the given PCS. "
    ::= { ifMauPerPCSLaneStatsEntry 1 }

ifMauPPLFECCorrectedBlocks OBJECT-TYPE
    SYNTAX      Counter64
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "Generalized nonresettable counter. This counter has a
        maximum increment rate of 1 200 000 counts per second
        for 1000 Mb/s implementations, 5 000 000 counts per
        second for 10 Gb/s and 40 Gb/s implementations, and
        2 500 000 counts per second for 100 Gb/s implementations.

        For 1000BASE-PX, 10/25/40/50/100/200/400GBASE-R,
        10GBASE-P, 10GBASE-PR, or 10/1GBASE-PRX PHYs that
        support FEC across the MDI, an array of corrected FEC
        block counters. The counters do not increment for other
        PHY types. The indices of this array (0 to N - 1) denote
        the FEC sublayer instance number where N is the number
        of FEC sublayer instances in use.

        The number of FEC sublayer instances in use is set to one
        for PHYs that do not use PCS lanes or use a single FEC
        instance for all lanes. Each element of this array
        contains a count of corrected FEC blocks for that FEC
        sublayer instance.

        Increment the counter by one for each FEC block received
        across the MDI that is corrected by the FEC function in
        the PHY for the corresponding lane or FEC sublayer
        instance.

        If IEEE Std 802.3, Clause 45 MDIO Interface to the PCS
        is present, then this object maps to the FEC corrected
        blocks counter for PSC lane number n, identified by
        the ifPCSLaneIndex object
        (see IEEE Std 802.3, 45.2.10.5 and 45.2.1.109
        for 10GBASE-R, 45.2.3.41 for 10GBASE-PR and
        10/1GBASE-PRX, 45.2.1.131 for BASE-R, 45.2.1.118 for
        RS-FEC, 45.2.3.62 for PCS FEC, and 45.2.1.227 for

```



SC-FEC)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.17"  
::= { ifMauPerPCSLaneStatsEntry 2 }

ifMauPPLFECUncorrectableBlocks OBJECT-TYPE

SYNTAX Counter64  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"Generalized nonresettable counter. This counter has a maximum increment rate of 1 200 000 counts per second for 1000 Mb/s implementations, 5 000 000 counts per second for 10 Gb/s and 40 Gb/s implementations, and 2 500 000 counts per second for 100 Gb/s implementations.

For 1000BASE-PX, 10/25/40/50/100/200/400GBASE-R, 100GBASE-P, 10GBASE-PR, or 10/1GBASE-PRX PHYs that support FEC across the MDI, an array of uncorrectable FEC block counters. The counters do not increment for other PHY types. The indices of this array (0 to N - 1) denote the FEC sublayer instance number where N is the number of FEC sublayer instances in use.

The number of FEC sublayer instances in use is set to one for PHYs that do not use PCS lanes or use a single FEC instance for all lanes. Each element of this array contains a count of uncorrectable FEC blocks for that FEC sublayer instance.

Increment the counter by one for each FEC block that is determined to be uncorrectable by the FEC function in the PHY for the corresponding lane or FEC sublayer instance.

If IEEE Std 802.3, Clause 45 MDIO Interface to the PCS is present, then this object maps to the FEC uncorrectable blocks counter for PSC lane number n, identified by the ifPCSLaneIndex object (see IEEE Std 802.3, 45.2.10.6 and 45.2.1.110 for 10GBASE-R, 45.2.3.42 for 10GBASE-PR and 10/1GBASE-PRX, 45.2.1.149 for BASE-R, 45.2.1.119 for RS-FEC, 45.2.3.63 for PCS FEC, and 45.2.1.228 for SC-FEC)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.18"  
::= { ifMauPerPCSLaneStatsEntry 3 }

ifMauBIPErrorCount OBJECT-TYPE

SYNTAX Counter32  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"Generalized nonresettable counter. This counter

has a maximum increment rate of 10 000 counts per second for 40 Gb/s and 50 Gb/s implementations and 5 000 counts per second for 100 Gb/ s implementations.

For 40/50/100GBASE-R PHYs and 100GBASE-P PHYs, an array of BIP error counters. The counters do not increment for other PHY types. The indices of this array (0 to N - 1) denote the PCS lane number where n is the number of PCS lanes in use. Each element of this array contains a count of BIP errors for that PCS lane.

Increment the counter by one for each BIP error detected during alignment marker removal in the PCS identified by the ifPCSLaneIndex object.

If IEEE Std 802.3, Clause 45 MDIO Interface to the PCS is present, then this object maps to the BIP error counter for PCS lane number n, identified by the ifPCSLaneIndex object (see IEEE Std 802.3, 45.2.3.47 and 45.2.3.48)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.11"  
::= { ifMauPerPCSLaneStatsEntry 4 }

ifMauPCStoPHYLaneMapping OBJECT-TYPE

SYNTAX Unsigned32  
MAX-ACCESS read-only  
STATUS current

DESCRIPTION

"For 40/50/100/200/400GBASE-R PHYs and 100GBASE-P PHYs, an array of PCS lane identifiers. The indices of this array (0 to N - 1) denote the service interface lane number where n is the number of PCS lanes in use. Each element of this array contains the PCS lane number for the PCS lane that has been detected in the corresponding service interface lane.

If IEEE Std 802.3, Clause 45 MDIO Interface to the PCS is present, then this object maps to the Lane mapping register for PCS lane number n, identified by the ifPCSLaneIndex object (see IEEE Std 802.3, 45.2.3.49 and 45.2.3.50)."

REFERENCE

"IEEE Std 802.3, 30.5.1.1.12"  
::= { ifMauPerPCSLaneStatsEntry 5 }

dot3PlaceholderGroup OBJECT IDENTIFIER

::= { ieee8023snmpDot3MauMgt 3 }

dot3Placeholder OBJECT-TYPE

SYNTAX INTEGER { placeholder(1) }  
MAX-ACCESS read-only  
STATUS current



#### DESCRIPTION

"A placeholder object to preserve the assignments that follow in the module. The assignment was given to the object broadMauBasicTable in earlier versions of this module. Preserving the assignments that follow is considered important because they are used for the IANA-MAU-MIB to assign as MAU type values."

#### REFERENCE

"none"

```
::= { dot3PlaceholderGroup 1 }
```

dot3IfMauAutoNegGroup OBJECT IDENTIFIER

```
::= { ieee8023snmpDot3MauMgt 5 }
```

ifMauAutoNegTable OBJECT-TYPE

SYNTAX SEQUENCE OF IfMauAutoNegEntry

MAX-ACCESS not-accessible

STATUS current

#### DESCRIPTION

"Configuration and status objects for the Auto-Negotiation function of MAUs attached to interfaces.

The ifMauAutoNegTable applies to systems in which Auto-Negotiation is supported on one or more MAUs attached to interfaces. Note that if Auto-Negotiation is present and enabled, the ifMauType object reflects the result of the Auto-Negotiation function."

```
::= { dot3IfMauAutoNegGroup 1 }
```

ifMauAutoNegEntry OBJECT-TYPE

SYNTAX IfMauAutoNegEntry

MAX-ACCESS not-accessible

STATUS current

#### DESCRIPTION

"An entry in the table, containing configuration and status information for the Auto-Negotiation function of a particular MAU."

INDEX { ifMauIfIndex, ifMauIndex }

```
::= { ifMauAutoNegTable 1 }
```

IfMauAutoNegEntry ::= SEQUENCE {

ifMauAutoNegAdminStatus	INTEGER,
ifMauAutoNegRemoteSignaling	INTEGER,
ifMauAutoNegConfig	INTEGER,
ifMauAutoNegRestart	INTEGER,
ifMauAutoNegCapabilityBits	IANAifMauAutoNegCapBits,
ifMauAutoNegCapAdvertisedBits	IANAifMauAutoNegCapBits,
ifMauAutoNegCapReceivedBits	IANAifMauAutoNegCapBits,
ifMauAutoNegRemoteFaultAdvertised	INTEGER,
ifMauAutoNegRemoteFaultReceived	INTEGER

}



#### ifMauAutoNegAdminStatus OBJECT-TYPE

SYNTAX INTEGER { enabled(1), disabled(2) }  
MAX-ACCESS read-write  
STATUS current  
DESCRIPTION

"Setting this object to enabled(1) will cause the interface that has the Auto-Negotiation signaling ability to be enabled.

If the value of this object is disabled(2) then the interface will act as it would if it had no Auto-Negotiation signaling. Under these conditions, an IEEE 802.3 MAU will immediately be forced to the state indicated by the value of the object ifMauDefaultType.

When ifMauAutoNegAdminStatus transitions from enabled to disabled, the agent implementation shall verify that the operational type of the MAU (as reported by ifMauType) correctly transitions to the value specified by the ifMauDefaultType object, rather than continuing to operate at the value earlier determined by the Auto-Negotiation function."

#### REFERENCE

"IEEE Std 802.3, 30.6.1.1.2, and 30.6.1.2.2"  
 ::= { ifMauAutoNegEntry 1 }

#### ifMauAutoNegRemoteSignaling OBJECT-TYPE

SYNTAX INTEGER { detected(1), notdetected(2) }  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A value indicating whether the remote end of the link is using Auto-Negotiation signaling. It takes the value detected(1) if and only if, during the previous link negotiation, FLP Bursts were received."

#### REFERENCE

"IEEE Std 802.3, 30.6.1.1.3"  
 ::= { ifMauAutoNegEntry 2 }

#### ifMauAutoNegConfig OBJECT-TYPE

SYNTAX INTEGER { other(1), configuring(2), complete(3), disabled(4), parallelDetectFail(5) }  
MAX-ACCESS read-only  
STATUS current  
DESCRIPTION

"A value indicating the current status of the Auto-Negotiation process. The enumeration parallelDetectFail(5) maps to a failure in parallel detection as defined in IEEE Std 802.3, 28.2.3.1."

#### REFERENCE



```
"IEEE Std 802.3, 30.6.1.1.4"  
 ::= { ifMauAutoNegEntry 4 }
```

```
ifMauAutoNegRestart OBJECT-TYPE
```

```
SYNTAX      INTEGER { restart(1), norestart(2) }
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"If the value of this object is set to  
restart(1) then this will force Auto-Negotiation  
to begin link renegotiation. If Auto-Negotiation  
signaling is disabled, a write to this object  
has no effect.
```

```
Setting the value of this object to norestart(2)  
has no effect."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.6.1.2.1"
```

```
 ::= { ifMauAutoNegEntry 5 }
```

```
ifMauAutoNegCapabilityBits OBJECT-TYPE
```

```
SYNTAX      IANAifMauAutoNegCapBits
```

```
MAX-ACCESS  read-only
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"A value that uniquely identifies the set of  
capabilities of the local Auto-Negotiation  
entity. Note that interfaces that support this  
MIB may have capabilities that extend beyond the  
scope of this MIB.
```

```
Note that the local Auto-Negotiation entity may  
support some capabilities beyond the scope of  
this MIB. This is indicated by returning the  
bit value bOther in addition to any bit values  
for standard capabilities that are listed in the  
IANAifMauAutoNegCapBits TC."
```

```
REFERENCE
```

```
"IEEE Std 802.3, 30.6.1.1.5
```

```
."
```

```
 ::= { ifMauAutoNegEntry 6 }
```

```
ifMauAutoNegCapAdvertisedBits OBJECT-TYPE
```

```
SYNTAX      IANAifMauAutoNegCapBits
```

```
MAX-ACCESS  read-write
```

```
STATUS      current
```

```
DESCRIPTION
```

```
"A value that uniquely identifies the set of  
capabilities advertised by the local  
Auto-Negotiation entity.
```

```
Capabilities in this object that are not  
available in ifMauAutoNegCapabilityBits cannot  
be enabled.
```

Note that the local Auto-Negotiation entity may advertise some capabilities beyond the scope of this MIB. This is indicated by returning the bit value bOther in addition to any bit values for standard capabilities that are listed in the IANAifMauAutoNegCapBits TC."

REFERENCE

"IEEE Std 802.3, 30.6.1.1.6"  
 ::= { ifMauAutoNegEntry 7 }

ifMauAutoNegCapReceivedBits OBJECT-TYPE

SYNTAX IANAifMauAutoNegCapBits

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A value that uniquely identifies the set of capabilities received from the remote Auto-Negotiation entity.

Note that interfaces that support this MIB may be attached to remote Auto-Negotiation entities that have capabilities beyond the scope of this MIB. This is indicated by returning the bit value bOther in addition to any bit values for standard capabilities that are listed in the IANAifMauAutoNegCapBits TC."

REFERENCE

"IEEE Std 802.3, 30.6.1.1.7"  
 ::= { ifMauAutoNegEntry 8 }

ifMauAutoNegRemoteFaultAdvertised OBJECT-TYPE

SYNTAX INTEGER { noError(1), offline(2), linkFailure(3), autoNegError(4) }

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"A value that identifies any local fault indications that this MAU has detected and will advertise at the next Auto-Negotiation interaction for 1000 Mb/s MAUs."

REFERENCE

"IEEE Std 802.3, 30.6.1.1.6"  
 ::= { ifMauAutoNegEntry 9 }

ifMauAutoNegRemoteFaultReceived OBJECT-TYPE

SYNTAX INTEGER { noError(1), offline(2), linkFailure(3), autoNegError(4) }

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"A value that identifies any fault indications received from the far end of a link by the local Auto-Negotiation entity for 1000 Mb/s MAUs."

REFERENCE



```

    "IEEE Std 802.3, 30.6.1.1.7"
 ::= { ifMauAutoNegEntry 10 }

mauModConf OBJECT IDENTIFIER
 ::= { ieee8023mauMIB 2 }

mauModCompls OBJECT IDENTIFIER
 ::= { mauModConf 1 }

mauModObjGrps OBJECT IDENTIFIER
 ::= { mauModConf 2 }

mauModNotGrps OBJECT IDENTIFIER
 ::= { mauModConf 3 }

rpMauJabberTrap NOTIFICATION-TYPE
OBJECTS      { rpMauJabberState }
STATUS       current
DESCRIPTION
    "This trap is sent whenever a managed repeater
    MAU enters the jabber state.

    The agent shall limit the generation of
    consecutive rpMauJabberTraps so that there is at
    least a five-second gap between them."
REFERENCE
    "IEEE Std 802.3, 30.5.1.3.1"
 ::= { snmpDot3MauTraps 1 }

ifMauJabberTrap NOTIFICATION-TYPE
OBJECTS      { ifMauJabberState }
STATUS       current
DESCRIPTION
    "This trap is sent whenever a managed interface
    MAU enters the jabber state.

    The agent shall limit the generation of
    consecutive ifMauJabberTraps so that there is at
    least a five-second gap between them."
REFERENCE
    "IEEE Std 802.3, 30.5.1.3.1"
 ::= { snmpDot3MauTraps 2 }

mauRpGrpBasic OBJECT-GROUP
OBJECTS      { rpMauType, rpMauStatus, rpMauMediaAvailable,
              rpMauMediaAvailableStateExits, rpMauJabberState,
              rpMauJabberingStateEnters }
STATUS       current
DESCRIPTION
    "Basic conformance group for MAUs attached to
    repeater ports. This group is also the
    conformance specification for RFC 1515
    implementations."
 ::= { mauModObjGrps 1 }

```

```

mauRpGrp100Mbs OBJECT-GROUP
  OBJECTS      { rpMauFalseCarriers }
  STATUS       current
  DESCRIPTION
    "Conformance group for MAUs attached to
    repeater ports with 100 Mb/s or greater
    capability."
  ::= { mauModObjGrps 2 }

mauRpGrpJack OBJECT-GROUP
  OBJECTS      { rpJackType }
  STATUS       current
  DESCRIPTION
    "Conformance group for MAUs attached to
    repeater ports with managed jacks."
  ::= { mauModObjGrps 3 }

mauIfGrpBasic OBJECT-GROUP
  OBJECTS      { ifMauType, ifMauStatus, ifMauMediaAvailable,
                ifMauMediaAvailableStateExits, ifMauJabberState,
                ifMauJabberingStateEnters, dot3Placeholder }
  STATUS       current
  DESCRIPTION
    "Basic conformance group for MAUs attached to
    interfaces. This group also provides a
    conformance specification for RFC 1515
    implementations."
  ::= { mauModObjGrps 4 }

mauIfGrpJack OBJECT-GROUP
  OBJECTS      { ifJackType }
  STATUS       current
  DESCRIPTION
    "Conformance group for MAUs attached to
    interfaces with managed jacks."
  ::= { mauModObjGrps 5 }

mauIfGrpHighCapacity OBJECT-GROUP
  OBJECTS      { ifMauFalseCarriers, ifMauTypeListBits,
                ifMauDefaultType, ifMauAutoNegSupported }
  STATUS       current
  DESCRIPTION
    "Conformance group for MAUs attached to
    interfaces with 100 Mb/s or greater capability."
  ::= { mauModObjGrps 6 }

mauIfGrpAutoNeg2 OBJECT-GROUP
  OBJECTS      { ifMauAutoNegAdminStatus, ifMauAutoNegRemoteSignaling,
                ifMauAutoNegConfig, ifMauAutoNegCapabilityBits,
                ifMauAutoNegCapAdvertisedBits,
                ifMauAutoNegCapReceivedBits, ifMauAutoNegRestart }
  STATUS       current
  DESCRIPTION

```



```

        "Conformance group for MAUs attached to
        interfaces with managed Auto-Negotiation."
 ::= { mauModObjGrps 7 }

mauIfGrpAutoNeg1000Mbps OBJECT-GROUP
OBJECTS      { ifMauAutoNegRemoteFaultAdvertised,
               ifMauAutoNegRemoteFaultReceived }
STATUS       current
DESCRIPTION
    "Conformance group for 1000 Mb/s MAUs attached to
    interfaces with managed Auto-Negotiation."
 ::= { mauModObjGrps 8 }

mauIfGrpHCStats OBJECT-GROUP
OBJECTS      { ifMauHCFALSECarriers, ifMauPCSCodingViolations }
STATUS       current
DESCRIPTION
    "Conformance for high capacity statistics for
    MAUs attached to interfaces."
 ::= { mauModObjGrps 9 }

mauIfGrpFEC OBJECT-GROUP
OBJECTS      { ifMauFECAbility, ifMauFECMode }
STATUS       current
DESCRIPTION
    "Conformance for FEC capable
    MAUs attached to interfaces."
 ::= { mauModObjGrps 10 }

mauIfGrpSNR OBJECT-GROUP
OBJECTS      { ifMauSNROpMarginChnlA, ifMauSNROpMarginChnlB,
               ifMauSNROpMarginChnlC, ifMauSNROpMarginChnlD }
STATUS       current
DESCRIPTION
    "Conformance for SNR operating margin reporting
    MAUs attached to interfaces."
 ::= { mauModObjGrps 11 }

mauIfGrpEEE OBJECT-GROUP
OBJECTS      { ifMauEEESupportList, ifMauEEELDFastRetrainCount,
               ifMauEEELPFastRetrainCount }
STATUS       current
DESCRIPTION
    "Conformance EEE support and Fast Retrain count
    reporting MAUs attached to interfaces."
 ::= { mauModObjGrps 12 }

mauIfGrpTimeSync OBJECT-GROUP
OBJECTS      { ifMauTimeSyncCapabilityTX, ifMauTimeSyncCapabilityRX,
               ifMauTimeSyncDelayTXmax, ifMauTimeSyncDelayTXmin,
               ifMauTimeSyncDelayRXmax, ifMauTimeSyncDelayRXmin }
STATUS       current
DESCRIPTION
    "Conformance Time Sync support and delay

```

```

        reporting MAUs attached to interfaces."
 ::= { mauModObjGrps 13 }

mauIfGrpPerPCSLaneStats OBJECT-GROUP
  OBJECTS      { ifMauPPLFECCorrectedBlocks,
                 ifMauPPLFECUncorrectableBlocks, ifMauBIPErrorCount,
                 ifMauPCStoPHYLaneMapping }
  STATUS       current
  DESCRIPTION   "Conformance Per-PCS lane statistics
                 reporting MAUs attached to interfaces."
 ::= { mauModObjGrps 14 }

rpMauNotifications NOTIFICATION-GROUP
  NOTIFICATIONS { rpMauJabberTrap }
  STATUS       current
  DESCRIPTION   "Notifications for repeater MAUs."
 ::= { mauModNotGrps 1 }

ifMauNotifications NOTIFICATION-GROUP
  NOTIFICATIONS { ifMauJabberTrap }
  STATUS       current
  DESCRIPTION   "Notifications for interface MAUs."
 ::= { mauModNotGrps 2 }

mauModRpCompl2 MODULE-COMPLIANCE
  STATUS       current
  DESCRIPTION   "Compliance for MAUs attached to repeater
                 ports.

                 Note that compliance with this compliance
                 statement requires compliance with the
                 snmpRpPtrModCompl MODULE-COMPLIANCE statement of
                 the IEEE8023-SNMP-REPEATER-MIB defined in Clause 7."

  MODULE      -- this module

  MANDATORY-GROUPS      { mauRpGrpBasic }

  GROUP      mauRpGrp100Mbs
  DESCRIPTION
    "Implementation of this optional group is
    recommended for MAUs that have 100 Mb/s or
    greater capability."

  GROUP      mauRpGrpJack
  DESCRIPTION
    "Implementation of this optional group is
    recommended for MAUs that have one or more
    external jacks."

```

```

GROUP    rpMauNotifications
DESCRIPTION
    "Implementation of this group is recommended
    for MAUs attached to repeater ports."

OBJECT   rpMauStatus
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."

::= { mauModCompls 1 }

mauModIfCompl3 MODULE-COMPLIANCE
STATUS    current
DESCRIPTION
    "Compliance for MAUs attached to interfaces.

    Note that compliance with this compliance
    statement requires compliance with the
    ifCompliance3 MODULE-COMPLIANCE statement of the
    IF-MIB (RFC 2863) and the dot3Compliance2
    MODULE-COMPLIANCE statement of the
    IEEE8023-EtherLike-MIB defined in Clause 10."

MODULE    -- this module

MANDATORY-GROUPS    { mauIfGrpBasic }

GROUP    mauIfGrpHighCapacity
DESCRIPTION
    "Implementation of this optional group is
    recommended for MAUs that have 100 Mb/s
    or greater capability."

GROUP    mauIfGrpHCStats
DESCRIPTION
    "Implementation of this group is mandatory
    for MAUs that have 1000 Mb/s capacity, and
    is recommended for MAUs that have 100 Mb/s
    capacity."

GROUP    mauIfGrpJack
DESCRIPTION
    "Implementation of this optional group is
    recommended for MAUs that have one or more
    external jacks."

GROUP    mauIfGrpAutoNeg2
DESCRIPTION
    "Implementation of this group is mandatory
    for MAUs that support managed
    Auto-Negotiation."

GROUP    mauIfGrpAutoNeg1000Mbps

```

```
DESCRIPTION
    "Implementation of this group is mandatory
    for MAUs that have 1000 Mb/s or greater
    capability and support managed
    Auto-Negotiation."

GROUP    ifMauNotifications
DESCRIPTION
    "Implementation of this group is recommended
    for MAUs attached to interfaces."

GROUP    mauIfGrpFEC
DESCRIPTION
    "Implementation of this optional group is
    recommended for MAUs that incorporate FEC."

GROUP    mauIfGrpSNR
DESCRIPTION
    "Implementation of this optional group is
    recommended for MAUs that report SNR operating
    margin."

GROUP    mauIfGrpEEE
DESCRIPTION
    "Implementation of this group is
    mandatory for MAUs that support EEE."

GROUP    mauIfGrpTimeSync
DESCRIPTION
    "Implementation of this group is
    mandatory for MAUs that support Time Sync"

GROUP    mauIfGrpPerPCSLaneStats
DESCRIPTION
    "Implementation of this group is
    mandatory for MAUs that report per-PCS lane
    statistics."

OBJECT   ifMauStatus
MIN-ACCESS read-only
DESCRIPTION
    "Write access is not required."

 ::= { mauModCompls 2 }

END -- end of module IEEE8023-MAU-MIB.
□
```