



**Table 30–7—LLDP capabilities (continued)**

			LLDP Basic Package (mandatory)	LLDP MAC/PHY Configuration/Status Local Package (conditional)	LLDP MAC/PHY Configuration/Status Remote Package (conditional)	LLDP Power via MDI Local Package (conditional)	LLDP Power via MDI Remote Package (conditional)	LLDP Power via MDI Measurement Local Package (conditional)	LLDP Power via MDI Measurement Remote Package (conditional)	LLDP Link Aggregation Local Package (conditional)	LLDP Link Aggregation Remote Package (conditional)	LLDP Maximum Frame Size Local Package (conditional)	LLDP Maximum Frame Size Remote Package (conditional)	LLDP EEE Local Package (optional)	LLDP EEE Remote Package (optional)
aLldpXdot3LocPDMeasurementCurrent	ATTRIBUTE	GET					X								
aLldpXdot3LocPDMeasurementEnergy	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasVoltageSupport	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasCurrentSupport	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasEnergySupport	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasurementSource	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasurementVoltage	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasurementCurrent	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEMeasurementEnergy	ATTRIBUTE	GET					X								
aLldpXdot3LocPSEPowerPriceIndex	ATTRIBUTE	GET					X								
							X								
<b>oLldpXdot3RemSystemsGroup managed object class (30.12.3)</b>															
aLldpXdot3RemPDMeasuredVoltageValue	ATTRIBUTE	GET					X								
aLldpXdot3RemPDMeasuredCurrentValue	ATTRIBUTE	GET					X								
aLldpXdot3RemPSEMeasuredVoltageValue	ATTRIBUTE	GET					X								
aLldpXdot3RemPSEMeasuredCurrentValue	ATTRIBUTE	GET					X								
aLldpXdot3RemPowerPairsx	ATTRIBUTE	GET					X								
aLldpXdot3RemPDLoad	ATTRIBUTE	GET					X								
aLldpXdot3RemPDModeSelection	ATTRIBUTE	GET					X								
aLldpXdot3RemPowerClassx	ATTRIBUTE	GET					X								
aLldpXdot3RemPowerTypex	ATTRIBUTE	GET					X								
aLldpXdot3RemPD4PID	ATTRIBUTE	GET					X								
aLldpXdot3RemPSEMaxAvailPower	ATTRIBUTE	GET					X								

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**Table 30–7—LLDP capabilities (continued)**

			LLDP Basic Package (mandatory)	LLDP MAC/PHY Configuration/Status Local Package (conditional)	LLDP MAC/PHY Configuration/Status Remote Package (conditional)	LLDP Power via MDI Local Package (conditional)	LLDP Power via MDI Remote Package (conditional)	LLDP Power via MDI Measurement Local Package (conditional)	LLDP Power via MDI Measurement Remote Package (conditional)	LLDP Link Aggregation Local Package (conditional)	LLDP Link Aggregation Remote Package (conditional)	LLDP Maximum Frame Size Local Package (conditional)	LLDP Maximum Frame Size Remote Package (conditional)	LLDP IEEE Local Package (optional)	LLDP IEEE Remote Package (optional)
aLldpXdot3RemPSEAutoclassSupport	ATTRIBUTE	GET				X									
aLldpXdot3RemAutoclassCompleted	ATTRIBUTE	GET				X									
aLldpXdot3RemAutoclassRequest	ATTRIBUTE	GET				X									
aLldpXdot3RemPowerDownRequest	ATTRIBUTE	GET				X									
aLldpXdot3RemPDMMeasVoltageSupport	ATTRIBUTE	GET						X							
aLldpXdot3RemPDMMeasCurrentSupport	ATTRIBUTE	GET						X							
aLldpXdot3RemPDMMeasEnergySupport	ATTRIBUTE	GET						X							
aLldpXdot3RemPDMMeasurementSource	ATTRIBUTE	GET						X							
aLldpXdot3RemPDMMeasurementVoltage	ATTRIBUTE	GET						X							
aLldpXdot3RemPDMMeasurementCurrent	ATTRIBUTE	GET						X							
aLldpXdot3RemPDMMeasurementEnergy	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasVoltageSupport	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasCurrentSupport	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasEnergySupport	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasurementSource	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasurementVoltage	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasurementCurrent	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEMeasurementEnergy	ATTRIBUTE	GET						X							
aLldpXdot3RemPSEPowerPriceIndex	ATTRIBUTE	GET						X							

### 30.9 Management for DTE Power via MDI

*Editor's Note: 30.9 through 30.12 is included for the convenience of the reader and shall be removed prior to sponsor ballot.*

#### 30.9.1 PSE managed object class

This subclause formally defines the behaviours for the oPSE managed object class attributes and actions.

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### 30.9.1.1 PSE attributes

#### 30.9.1.1.1 aPSEID

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

The value of aPSEID is assigned so as to uniquely identify a PSE among the subordinate managed objects of the containing object.;

*Change 30.9.1.1.2 through 30.9.1.1.11 as follows:*

#### 30.9.1.1.2 aPSEAdminState

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

enabled	PSE functions enabled
disabled	PSE functions disabled

BEHAVIOUR DEFINED AS:

A read-only value that identifies the operational state of the PSE functions. An interface which can provide the PSE functions specified in Clause 33 will be enabled to do so when this attribute has the enumeration “enabled.” When this attribute has the enumeration “disabled” the interface will act as it would if it had no PSE function. The operational state of the PSE function can be changed using the acPSEAdminControl action. ~~If a Clause 22 MII or Clause 35 GMII is present, then this will map to the PSE Enable bit specified in 33.5.1.1.6;~~

#### 30.9.1.1.3 aPSEPowerPairsControlAbility

ATTRIBUTE

APPROPRIATE SYNTAX:

BOOLEAN

BEHAVIOUR DEFINED AS:

Indicates the ability to control which PSE Pinout Alternative (see 33.2.4) is used for PD detection and power. When “true” the PSE Pinout Alternative used can be controlled through the aPSEPowerPairs attribute. When “false” the PSE Pinout Alternative used cannot be controlled through the aPSEPowerPairs attribute. ~~If a Clause 22 MII or Clause 35 GMII is present, then this will map to the Pair Control Ability bit specified in 33.5.1.2.12;~~

#### 30.9.1.1.4 aPSEPowerPairs

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

signal	PSE Pinout Alternative A
spare	PSE Pinout Alternative B
<u>both</u>	<u>PSE Pinout Alternative A and Alternative B</u>

BEHAVIOUR DEFINED AS:

A read-write value that identifies the supported PSE Pinout Alternative specified in 33.2.4. A GET

operation returns the PSE Pinout Alternative in use. ~~A SET operation changes the PSE Pinout Alternative used to the indicated value only if the attribute aSectionSESThreshold is "true."~~ ~~If the attribute aPSEPowerPairsControlAbility is "true" a SET operation will cause the PSE functions to be disabled, the PSE Pinout Alternative used to be changed to the value indicated if supported, and then the PSE functions to be enabled.~~ ~~If the attribute aPSEPowerPairsControlAbility is "false" a SET operation has no effect.~~

The enumeration "signal" indicates that PSE Pinout Alternative A is used for PD detection and power. The enumeration "spare" indicates that PSE Pinout Alternative B is used for PD detection and power. The enumeration "both" indicates that the PSE Pinout uses both Alternative A and Alternative B for detection and power. ~~If a [Clause 22](#) MII or [Clause 35](#) GMII is present, then this will map to the Pair Control bits specified in [33.5.1.1.5](#);~~

### 30.9.1.1.5 aPSEPowerDetectionStatus

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

disabled	PSE disabled
searching	PSE searching
deliveringPower	PSE delivering power
test	PSE test mode
fault	PSE fault detected
otherFault	PSE implementation specific fault detected

BEHAVIOUR DEFINED AS:

A read-only value that indicates the current status of the PD Detection function specified in [33.2.6](#).

The enumeration "disabled" indicates that the PSE State diagram (Figure 33–13) is in the state DISABLED. The enumeration "deliveringPower" indicates that the PSE State diagram is in the state POWER\_ON. The enumeration "test" indicates that the PSE State diagram is in the state TEST\_MODE. The enumeration "fault" indicates that the PSE State diagram is in the state TEST\_ERROR. The enumeration "otherFault" indicates that the PSE State diagram is in the state IDLE due to the variable error\_condition = true. The enumeration "searching" indicates the PSE State diagram is in a state other than those listed above. ~~If a [Clause 22](#) MII or [Clause 35](#) GMII is present, then this will map to the PSE Status bits specified in [33.5.1.2.11](#);~~

NOTE—A derivative attribute may wish to apply a delay to the use of the "deliveringPower" enumeration as the PSE state diagram will enter then quickly exit the POWER\_ON state if a short-circuit or overcurrent condition is present when power is first applied.;

### 30.9.1.1.6 aPSEPowerClassification

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

class0	Class 0 PD
class1	Class 1 PD
class2	Class 2 PD
class3	Class 3 PD
class4	Class 4 PD
<u>class5</u>	<u>Class 5 PD</u>
<u>class6</u>	<u>Class 6 PD</u>
<u>class7</u>	<u>Class 7 PD</u>

class8                      Class 8 PD

BEHAVIOUR DEFINED AS:

A read-only value that indicates the PD Class of a detected PD as specified in 33.2.7.1.

This value is only valid while a PD is being powered, that is the attribute aLineSESThreshold  
aPSEPowerPairsControlAbility reporting the enumeration “deliveringPower”. If a Clause 22 MII  
or Clause 35 GMII is present, then this will map to the PD Class bits specified in 33.5.1.2.10.;

### **30.9.1.1.7 aPSEInvalidSignatureCounter**

ATTRIBUTE

APPROPRIATE SYNTAX:

Generalized nonresetable counter. This counter has a maximum increment rate of 2 counts per second.

BEHAVIOUR DEFINED AS:

This counter is incremented when the PSE state diagram (Figure 33–13) enters the state SIGNATURE\_INVALID. If a Clause 22 MII or Clause 35 GMII is present, then this will map to  
the Invalid Signature bit specified in 33.5.1.2.6.;

### **30.9.1.1.8 aPSEPowerDeniedCounter**

ATTRIBUTE

APPROPRIATE SYNTAX:

Generalized nonresetable counter. This counter has a maximum increment rate of 2 counts per second.

BEHAVIOUR DEFINED AS:

This counter is incremented when the PSE state diagram (Figure 33–13) enters the state POWER\_DENIED. If a Clause 22 MII or Clause 35 GMII is present, then this will map to the  
Power Denied bit specified in 33.5.1.2.4.;

### **30.9.1.1.9 aPSEOverLoadCounter**

ATTRIBUTE

APPROPRIATE SYNTAX:

Generalized nonresetable counter. This counter has a maximum increment rate of 2 counts per second.

BEHAVIOUR DEFINED AS:

This counter is incremented when the PSE state diagram (Figure 33–13) enters the state ERROR\_DELAY\_OVER. If a Clause 22 MII or Clause 35 GMII is present, then this will map to  
the Overload bit specified in 33.5.1.2.8.;

### **30.9.1.1.10 aPSEShortCounter**

ATTRIBUTE

APPROPRIATE SYNTAX:

Generalized nonresetable counter. This counter has a maximum increment rate of 2 counts per second.

BEHAVIOUR DEFINED AS:

This counter is incremented when the PSE state diagram (Figure 33–13) enters the state

ERROR\_DELAY\_SHORT. ~~If a Clause 22 MII or Clause 35 GMII is present, then this will map to the Short Circuit bit specified in 33.5.1.2.7.;~~

#### 30.9.1.1.11 aPSEMPSAbsentCounter

ATTRIBUTE

APPROPRIATE SYNTAX:

Generalized nonresetable counter. This counter has a maximum increment rate of 2 counts per second.

BEHAVIOUR DEFINED AS:

This counter is incremented when the PSE state diagram (Figure 33–13) transitions directly from the state POWER\_ON to the state IDLE due to tmpdo\_timer\_done being asserted. ~~If a Clause 22 MII or Clause 35 GMII is present, then this will map to the MPS Absent bit specified in 33.5.1.2.9.;~~

#### 30.9.1.1.12 aPSEActualPower

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

An integer value indicating present (actual) power being supplied by the PSE as measured at the MDI in milliwatts. The behaviour is undefined if the state of aPSEPowerDetectionStatus is anything other than deliveringPower. The sampling frequency and averaging is vendor-defined.;

#### 30.9.1.1.13 aPSEPowerAccuracy

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

An integer value indicating the accuracy associated with aPSEActualPower in +/- milliwatts.;

#### 30.9.1.1.14 aPSECumulativeEnergy

ATTRIBUTE

APPROPRIATE SYNTAX:

Generalized nonresetable counter. The counter has a maximum increment rate of 100000 per second.

BEHAVIOUR DEFINED AS:

A count of the cumulative energy supplied by the PSE as measured at the MDI in millijoules.;

#### 30.9.1.1.15 aPSEPowerPairsx

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

signal PSE Pinout Alternative A

spare PSE Pinout Alternative B

both PSE Pinout Alternative A and B

BEHAVIOUR DEFINED AS:

A read-write value that identifies the supported PSE Pinout Alternative specified in 33.2.4. A GET operation returns the PSE Pinout Alternative in use. A SET operation changes the PSE Pinout Alternative used to the indicated value only if the attribute aSectionSESThreshold is “true.” If the

attribute `aSectionSESThreshold` is “false” a SET operation has no effect.

The enumeration “signal” indicates that PSE Pinout Alternative A is used for PD detection and power. The enumeration “spare” indicates that PSE Pinout Alternative B is used for PD detection and power. The enumeration “both” indicates that the PSE Pinout uses both Alternative A and Alternative B for detection and power.;

### 30.9.1.2 PSE actions

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#### 30.9.1.2.1 `acPSEAdminControl`

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ACTION

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APPROPRIATE SYNTAX:

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Same as ~~aSectionStatus~~ `aPSEAdminState`

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BEHAVIOUR DEFINED AS:

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This action provides a means to alter a <del>SectionStatus</del> <u>aPSEAdminState</u> ;	1
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<b>30.9.2 PD managed object class</b>	3
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This subclause formally defines the behaviours for the oPD managed object class attributes.	5
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<b>30.9.2.1 PD attributes</b>	7
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<b>30.9.2.1.1 aPDID</b>	9
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ATTRIBUTE	11
APPROPRIATE SYNTAX:	12
INTEGER	13
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BEHAVIOUR DEFINED AS:	15
The value of aPDID is assigned so as to uniquely identify a PD Power via MDI classification local system among the subordinate managed objects of the containing object.;	16
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<b>30.10 Layer management for Midspan</b>	24
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<b>30.10.1.1.3 aMidSpanPSEGroupMap</b>	1
ATTRIBUTE	2
APPROPRIATE SYNTAX:	3
BITSTRING	4
BEHAVIOUR DEFINED AS:	5
A string of bits which reflects the current configuration of PSE groups that are viewed by PSE group managed objects. The length of the bitstring is “aMidSpanPSEGroupCapacity” bits. The first bit relates to PSE group 1. A “1” in the bitstring indicates presence of the PSE group, “0” represents absence of the PSE group.;	6
<b>30.10.1.2 Midspan notifications</b>	7
<b>30.10.1.2.1 nMidSpanPSEGroupMapChange</b>	8
NOTIFICATION	9
APPROPRIATE SYNTAX:	10
BITSTRING	11
BEHAVIOUR DEFINED AS:	12
This notification is sent when a change occurs in the PSE group structure of a Midspan device. This occurs only when a PSE group is logically removed from or added to a Midspan device. The nMidSpanPSEGroupMapChange notification is not sent when powering up a Midspan device. The value of the notification is the updated value of the aMidSpanPSEGroupMap attribute.;	13
<b>30.10.2 PSE Group managed object class</b>	14
This subclause formally defines the behaviours for the oPSEGroup managed object class, attributes, actions, and notifications.	15
<b>30.10.2.1 PSE Group attributes</b>	16
<b>30.10.2.1.1 aPSEGroupID</b>	17
ATTRIBUTE	18
APPROPRIATE SYNTAX:	19
INTEGER	20
BEHAVIOUR DEFINED AS:	21
A value unique within the Midspan device. The value of aPSEGroupID is assigned so as to uniquely identify a PSE group among the subordinate managed objects of the containing object (oMidSpan). This value is never greater than aMidSpanPSEGroupCapacity.;	22
<b>30.10.2.1.2 aPSECapacity</b>	23
ATTRIBUTE	24
APPROPRIATE SYNTAX:	25
INTEGER	26
BEHAVIOUR DEFINED AS:	27
The aPSECapacity is the number of PSEs contained within the PSE group. Valid range is 1 to 1024. Within each PSE group, the PSEs are uniquely numbered in the range from 1 to aPSECapacity. Some PSEs may not be present in a given PSE group instance, in which case the	28

actual number of PSEs present is less than aPSECapacity. The number of PSEs present is never greater than aPSECapacity.;

### 30.10.2.1.3 aPSEMap

ATTRIBUTE

APPROPRIATE SYNTAX:

BitString

BEHAVIOUR DEFINED AS:

A string of bits that reflects the current configuration of PSE managed objects within this PSE group. The length of the bitstring is “aPSECapacity” bits. The first bit relates to PSE 1. A “1” in the bitstring indicates presence of the PSE, “0” represents absence of the PSE.;

### 30.10.2.2 PSE Group notifications

#### 30.10.2.2.1 nPSEMapChange

NOTIFICATION

APPROPRIATE SYNTAX:

BitString

BEHAVIOUR DEFINED AS:

This notification is sent when a change occurs in the PSE structure of a PSE group. This occurs only when a PSE is logically removed from or added to a PSE group. The nPSEMapChange notification is not sent when powering up a Midspan device. The value of the notification is the updated value of the aPSEMap attribute.;

## 30.12 Layer Management for Link Layer Discovery Protocol (LLDP)

### 30.12.2 LLDP Local System Group managed object class

#### 30.12.2.1 LLDP Local System Group attributes

##### 30.12.2.1.5 aLldpXdot3LocPowerPortClass

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

pClassPSE PSE

pClassPD PD

BEHAVIOUR DEFINED AS:

A read-only value that identifies the port Class of the given port associated with the local system.;

##### 30.12.2.1.6 aLldpXdot3LocPowerMDISupported

ATTRIBUTE

APPROPRIATE SYNTAX:

BOOLEAN

BEHAVIOUR DEFINED AS:

A read-only Boolean value used to indicate whether the MDI power is supported on the given port associated with the local system.;

<b>30.12.2.1.7 aLldpXdot3LocPowerMDIEnabled</b>	1
ATTRIBUTE	2
APPROPRIATE SYNTAX:	3
BOOLEAN	4
BEHAVIOUR DEFINED AS:	5
A read-only Boolean value used to identify whether MDI power is enabled on the given port associated with the local system.;	6
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<b>30.12.2.1.8 aLldpXdot3LocPowerPairControlable</b>	11
ATTRIBUTE	12
APPROPRIATE SYNTAX:	13
BOOLEAN	14
BEHAVIOUR DEFINED AS:	15
A read-only Boolean value derived from the value of pethPsePortPowerPairsControlAbility object and used to indicate whether the pair selection can be controlled on the given port associated with the local system.;	16
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<b>30.12.2.1.9 aLldpXdot3LocPowerPairs</b>	22
ATTRIBUTE	23
APPROPRIATE SYNTAX:	24
The same as used for aPSEPowerPairs	25
BEHAVIOUR DEFINED AS:	26
A read-only the value that contains the value of the pethPsePortPowerPairs object which is associated with the given port on the local system.;	27
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<b>30.12.2.1.10 aLldpXdot3LocPowerClass</b>	32
ATTRIBUTE	33
APPROPRIATE SYNTAX:	34
The same as used for aPSEPowerClassification	35
BEHAVIOUR DEFINED AS:	36
A read-only the value that contains the value of the pethPsePortPowerClassifications object which is associated with the given port on the local system.;	37
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<b>30.12.2.1.14 aLldpXdot3LocPowerType</b>	42
ATTRIBUTE	43
APPROPRIATE SYNTAX:	44
BIT STRING [SIZE (2)]	45
BEHAVIOUR DEFINED AS:	46
A GET attribute that returns a bit string indicating whether the local system is a PSE or a PD and whether it is Type 1 or Type 2. The first bit indicates Type 1 or Type 2. The second bit indicates PSE or PD. A PSE shall set this bit to indicate a PSE. A PD shall set this bit to indicate a PD.;	47
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### 30.12.2.1.15 aLldpXdot3LocPowerSource

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (2)]

BEHAVIOUR DEFINED AS:

A GET attribute that returns a bit string 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.;

### 30.12.2.1.16 aLldpXdot3LocPowerPriority

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED value list that has the following entries:

low	low priority PD
high	high priority PD
critical	critical priority PD
unknown	priority unknown

BEHAVIOUR DEFINED AS:

A GET attribute that 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.;

### 30.12.2.1.17 aLldpXdot3LocPDRequestedPowerValue

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that 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 mirrors 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. The PD requested power value is encoded according to Equation (79–1), where  $X$  is the decimal value of aLldpXdot3LocPDRequestedPowerValue.;

### 30.12.2.1.18 aLldpXdot3LocPSEAllocatedPowerValue

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that 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 mirrors 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. The PSE allocated power value is encoded according to 1  
Equation (79–2), where  $X$  is the decimal value of `aLdpXdot3LocPSEAllocatedPowerValue`.; 2  
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**NOT PART OF BASELINE:**

Items 30,12.2.1.18a to 30.12.2.1.18d moved to the end of this document as they are need to support the new Measurement TLV section.



<b>30.12.2.1.18e aLldpXdot3LocPSEPowerPairsx</b>	1
ATTRIBUTE	2
APPROPRIATE SYNTAX:	3
The same as used for aPSEPowerPairsx	4
BEHAVIOUR DEFINED AS:	5
A read-only the value that contains the value for the PSE on the local system.;	6
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<b>30.12.2.1.18f aLldpXdot3LocPDLoad</b>	15
ATTRIBUTE	16
APPROPRIATE SYNTAX:	17
BOOLEAN	18
BEHAVIOUR DEFINED AS:	19
A read-only Boolean value use to indicate the load configuration of a dual-signature PD on the local system.;	20
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<b>30.12.2.1.18g aLldpXdot3LocPDModeSelection</b>	25
ATTRIBUTE	26
APPROPRIATE SYNTAX:	27
BOOLEAN	28
BEHAVIOUR DEFINED AS:	29
A read-only attribute that returns if an ongoing power negotiation applies to Mode A or Mode B for a dual-signature PD.;	30
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	36
<b>30.12.2.1.18h aLldpXdot3LocPowerClassx</b>	37
ATTRIBUTE	38
APPROPRIATE SYNTAX:	39
An ENUMERATED VALUE that has one of the following entries:	40
pClassPSE    PSE	41
pClassPD    PD	
BEHAVIOUR DEFINED AS:	
A read-only value that identifies the port Class of the given port associated with the local system.;	45
	46
<b>30.12.2.1.18i aLldpXdot3LocPowerTypex</b>	47
ATTRIBUTE	48
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (4)]	
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the local system is a PSE or a PD and	



whether it is Type 1 to 4. The most significant first three bits indicates the Type. The least significant bit indicates PSE or PD. A PSE shall set this bit to indicate a PSE. A PD shall set this bit to indicate a PD.;

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BEHAVIOUR DEFINED AS:	1
A GET attribute that returns the Type of the PSE or PD, and if the device is a PSE or PD.;	2
	3
<b>30.12.2.1.18j aLldpXdot3Loc4PD4PID</b>	4
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (1)]	
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the local system supports powering of both PD Modes.	
	11
	12
<b>30.12.2.1.18k aLldpXdot3LocPSEMaxAvailPower</b>	13
ATTRIBUTE	14
APPROPRIATE SYNTAX:	15
INTEGER	16
BEHAVIOUR DEFINED AS:	17
A GET attribute that returns the PSE maximum available power value. This value is encoded according to Equation (79–2), where X is the value of aLldpXdot3LocPSEMaxAvailPower.;	18
	19
	20
	21
	22
<b>30.12.2.1.18l aLldpXdot3LocPSEAutoclassSupport</b>	23
ATTRIBUTE	24
BIT STRING [SIZE (1)]	25
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the local PSE system supports Autoclass.	
	30
	31
	32
<b>30.12.2.1.18m aLldpXdot3LocAutoclassCompleted</b>	33
ATTRIBUTE	34
BIT STRING [SIZE (1)]	35
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the local PSE system has completed the Autoclass measurement.	
	41
	42
<b>30.12.2.1.18n aLldpXdot3LocAutoclassRequest</b>	43
ATTRIBUTE	44
APPROPRIATE SYNTAX:	45
BIT STRING [SIZE (1)]	46
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the local PD system is requesting an Autoclass measurement and power budget adjustment.	

**NOT PART OF THE BASELINE:**  
The group should decide if items flagged as ??? are correct. Correct them in the comment or give the Editor license to make the

correction. Note this was corrected during the meeting.

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	3
	4
<b>30.12.2.1.18o aLldpXdot3LocPowerDownRequest</b>	5
	6
BIT STRING [SIZE (8)]	
BEHAVIOUR DEFINED AS:	
A SET attribute for a bit string that indicates the local PD system is requesting a power down when the value is 0xDD.	
	13
	14
	15
<b>30.12.2.1.18p aLldpXdot3LocPDMeasVoltageSupport</b>	16
	22
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (1)]	
BEHAVIOUR DEFINED AS:	
A GET attribute that indicates the local PD is capable of providing a voltage measurement.;	23
	24
<b>30.12.2.1.18q aLldpXdot3LocPDMeasCurrentSupport</b>	25
	26
	32
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (1)]	
BEHAVIOUR DEFINED AS:	
A GET attribute that indicates the local PD is capable of providing a current measurement.;	
	33
	34
<b>30.12.2.1.18r aLldpXdot3LocPDMeasEnergySupport</b>	35
	42
A	
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (1)]	
BEHAVIOUR DEFINED AS:	
A GET attribute that indicates the local PD is capable of providing an energy measurement.;	
	43
	44
<b>30.12.2.1.18s aLldpXdot3LocPDMeasurementSource</b>	45
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (2)]	
BEHAVIOUR DEFINED AS:	
A SET attribute value that indicates to local PD on what Mode the measurement is to be taken .;	
	2
	3
<b>30.12.2.1.18t aLldpXdot3LocPDMeasurementVoltage</b>	4
	5
ATTRIBUTE	6
APPROPRIATE SYNTAX:	7
INTEGER	8

BEHAVIOUR DEFINED AS:

A GET attribute that returns the PD measured voltage.;

COMMENT NOT PART OF THE BASELINE:

It is not clear how much details these behaviors require. The reader could review clause 33 or we can placed more details here.  
Do we need to reference a formula as was done for power value transfers?

11

**30.12.2.1.18u aLldpXdot3LocPDMeasurementCurrent**

12  
13

ATTRIBUTE

14  
15

APPROPRIATE SYNTAX:  
INTEGER

16  
17  
18

BEHAVIOUR DEFINED AS:

A GET attribute that returns the measured PD current.;

19  
20  
21

**30.12.2.1.18v aLldpXdot3LocPDMeasurementEnergy**

22  
23

ATTRIBUTE

24  
25

APPROPRIATE SYNTAX:  
INTEGER

26  
27

BEHAVIOUR DEFINED AS:

GET attribute that returns the measured PD energy.;

28  
29  
30

**30.12.2.1.18w aLldpXdot3LocPSEMeasVoltageSupport**

31  
32

ATTRIBUTE

33  
34

APPROPRIATE SYNTAX:  
BIT STRING [SIZE (1)]

35  
36

BEHAVIOUR DEFINED AS:

A read-only attribute that returns a bit string indicating whether the local PSE system supports voltage measurements.;

37  
38  
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41

**30.12.2.1.18x aLldpXdot3LocPSEMeasCurrentSupport**

42  
43

ATTRIBUTE

44  
45

APPROPRIATE SYNTAX:  
BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A read-only attribute that returns a bit string indicating whether the local PSE system supports current measurements.

**30.12.2.1.18y aLldpXdot3LocPSEMeasEnergySupport**

50  
51

ATTRIBUTE

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APPROPRIATE SYNTAX:	1
BIT STRING [SIZE (1)]	
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the local PSE system supports energy measurements.;	
<b>30.12.2.1.18z aLldpXdot3LocPSEMeasurementSource</b>	6
ATTRIBUTE	7
APPROPRIATE SYNTAX:	8
BIT STRING [SIZE (2)]	9
BEHAVIOUR DEFINED AS:	10
A SET attribute value that indicates to local PSE on what Alternative the measurement is to be taken.;	14
<b>30.12.2.1.18aa aLldpXdot3LocPSEMeasurementVoltage</b>	15
ATTRIBUTE	16
APPROPRIATE SYNTAX:	17
INTEGER	18
BEHAVIOUR DEFINED AS:	19
A GET attribute that returns the measured PSE voltage.;	20
<b>30.12.2.1.18ab aLldpXdot3LocPSEMeasurementCurrent</b>	21
ATTRIBUTE	22
APPROPRIATE SYNTAX:	23
INTEGER	24
BEHAVIOUR DEFINED AS:	25
A GET attribute that returns the measured PSE current.;	26
<b>30.12.2.1.18ac aLldpXdot3LocPSEMeasurementEnergy</b>	27
ATTRIBUTE	28
APPROPRIATE SYNTAX:	29
INTEGER	30
BEHAVIOUR DEFINED AS:	31
A GET attribute that returns the measured PSE energy.;	32
<b>30.12.2.1.18ad aLldpXdot3LocPSEPowerPricelIndex</b>	33
ATTRIBUTE	34
APPROPRIATE SYNTAX:	35
INTEGER	36
	37
	38
	39
	40
	41
	42
	43
	44
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BEHAVIOUR DEFINED AS:

A GET attribute that returns an index of the price of power.;

**30.12.2.1.21 aLldpXdot3LocReducedOperationPowerValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns the reduced operation power value. For a PD, it is a power value that is lower than the currently requested power value. This reduced operation power value represents a power state in which the PD could continue to operate, but with less functionality than at the current PD requested power value. The PSE could optionally use this information in the event that the PSE subsequently requests a lower PD power value than the PD requested power value. For a PSE, it is a power value that the PSE could ask the PD to move to if the PSE wants the PD to move to a lower power state. The definition and encoding of PD requested power value is the same as described in aLldpXdot3LocPDRequestedPowerValue (30.12.2.1.17). The default value for this field is the hexadecimal value FFFF.;

COMMENT NOT PART OF BASELINE:

Where did this value come from? This is not in clause 33.

**30.12.3 LLDP Remote System Group managed object class**

This subclause formally defines the behaviours for the oLldpXdot3RemSystemsGroup managed object class attributes.

**30.12.3.1.5 aLldpXdot3RemPowerPortClass**

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED VALUE that has one of the following entries:

pClassPSE	PSE
pClassPD	PD

BEHAVIOUR DEFINED AS:

A read-only value that identifies the port Class of the given port associated with the remote system.;

**30.12.3.1.6 aLldpXdot3RemPowerMDISupported**

ATTRIBUTE

APPROPRIATE SYNTAX:

BOOLEAN

BEHAVIOUR DEFINED AS:

A read-only Boolean value used to indicate whether the MDI power is supported on the given port associated with the remote system.;

**30.12.3.1.7 aLldpXdot3RemPowerMDIEnabled**

ATTRIBUTE

APPROPRIATE SYNTAX:

BOOLEAN

BEHAVIOUR DEFINED AS:



A read-only Boolean value used to identify whether MDI power is enabled on the given port associated with the remote system.;

#### **30.12.3.1.8 aLldpXdot3RemPowerPairControlable**

ATTRIBUTE

APPROPRIATE SYNTAX:

BOOLEAN

BEHAVIOUR DEFINED AS:

A read-only Boolean value is derived from the value of pethPsePortPowerPairsControlAbility object and is used to indicate whether the pair selection can be controlled on the given port associated with the remote system.;

#### **30.12.3.1.9 aLldpXdot3RemPowerPairs**

ATTRIBUTE

APPROPRIATE SYNTAX:

The same as used for aPSEPowerPairs

BEHAVIOUR DEFINED AS:

A read-only the value that contains the value of the pethPsePortPowerPairs object which is associated with the given port on the remote system.;

#### **30.12.3.1.10 aLldpXdot3RemPowerClass**

ATTRIBUTE

APPROPRIATE SYNTAX:

The same as used for aPSEPowerClassification

BEHAVIOUR DEFINED AS:

A read-only the value that contains the value of the pethPsePortPowerClassifications object which is associated with the given port on the remote system.;

#### **30.12.3.1.14 aLldpXdot3RemPowerType**

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (2)]

BEHAVIOUR DEFINED AS:

A GET attribute that returns a bit string indicating whether the remote system is a PSE or a PD and whether it is Type 1 or Type 2. The first bit indicates Type 1 or Type 2. The second bit indicates PSE or PD.;

#### **30.12.3.1.15 aLldpXdot3RemPowerSource**

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (2)]

BEHAVIOUR DEFINED AS:

A GET attribute that returns a bit string 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.;

### 30.12.3.1.16 aLldpXdot3RemPowerPriority

ATTRIBUTE

APPROPRIATE SYNTAX:

An ENUMERATED value list that has the following entries:

low	low priority PD
high	high priority PD
critical	critical priority PD
unknown	priority unknown

BEHAVIOUR DEFINED AS:

A GET operation returns the priority of the PD system received from the remote system. For a PSE, this is the priority that the remote system requests from the PSE. For a PD, this is the priority that the remote system has assigned to the PD.;

### 30.12.3.1.17 aLldpXdot3RemPDRRequestedPowerValue

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that 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 aLldpXdot3LocPDRRequestedPowerValue (30.12.2.1.17).;

### 30.12.3.1.18 aLldpXdot3RemPSEAllocatedPowerValue

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns the PSE allocated power value received from the remote system. For a PSE, it is the PSE allocated power value that was used by the remote system to compute the power value that it has currently requested from the PSE. 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 (30.12.2.1.18).;

**NOT PART OF BASELINE:**

*Items 30.12.2.1.18a to 30.12.2.1.18d moved to the end of this document as they will need to be created to support the new Measurement LLDP section.*

**30.12.3.1.18e aLldpXdot3RemPowerPairsx**

ATTRIBUTE

APPROPRIATE SYNTAX:

The same as used for aPSEPowerPairsx

BEHAVIOUR DEFINED AS:

A read-only the value that contains the value for the pset on the remote system.;

**30.12.3.1.18f aLldpXdot3RemPDLoad**

ATTRIBUTE

APPROPRIATE SYNTAX:

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BOOLEAN	1
BEHAVIOUR DEFINED AS:	2
A read-only Boolean value use to indicate the load configuration of a dual-signature PD on the remote system.;	3
	4
<b>30.12.3.1.18g aLldpXdot3RemPDModeSelection</b>	5
	6
ATTRIBUTE	7
APPROPRIATE SYNTAX:	8
BOOLEAN	9
BEHAVIOUR DEFINED AS:	11
A read-only attribute that returns if an ongoing power negotiation applies to Mode A or Mode B for a dual-signature PD.;	12
	32
	13
	15
<b>30.12.3.1.18h aLldpXdot3RemPowerClassx</b>	16
	17
ATTRIBUTE	18
APPROPRIATE SYNTAX:	19
An ENUMERATED VALUE that has one of the following entries:	20
pClassPSE    PSE	21
pClassPD    PD	
BEHAVIOUR DEFINED AS:	
A read-only value that identifies the port Class of the given port associated with the remote system.;	25
	26
<b>30.12.3.1.18i aLldpXdot3RemPowerTypex</b>	27
	28
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (4)]	
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the remote system is a PSE or a PD and whether it is Type 1 to 4. The most significant first three bits indicates the Type. The least significant bit indicates PSE or PD. A PSE shall set this bit to indicate a PSE. A PD shall set this bit to indicate a PD.;	
	34
	35
<b>30.12.3.1.18j aLldpXdot3RemPD4PID</b>	36
	37
ATTRIBUTE	
APPROPRIATE SYNTAX:	
BIT STRING [SIZE (1)]	
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the remote system supports powering of both PD Modes.	
	41
	42
BEHAVIOUR DEFINED AS:	43
TBD, please comment;	44
	45
<b>30.12.3.1.18k aLldpXdot3RemPSEMaxAvailPower</b>	46
	47

ATTRIBUTE

INTEGER

48

APPROPRIATE SYNTAX:

A GET attribute that returns the PSE maximum available power value. This value is encoded according to Equation (79–2), where X is the value of aLdpXdot3RemPSEMaxAvailPower.;

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BEHAVIOUR DEFINED AS:

TBD, please comment;

**30.12.3.1.18l aLldpXdot3RemPSEAutoclassSupport**

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A read-only attribute that returns a bit string indicating whether the remote PSE system supports Autoclass.

**30.12.3.1.18m aLldpXdot3RemAutoclassCompleted**

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A read-only attribute that returns a bit string indicating whether the remote PSE system has completed the Autoclass measurement.

**30.12.3.1.18n aLldpXdot3RemAutoclassRequest**

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A read-only attribute that returns a bit string indicating whether the remote PD system is requesting an Autoclass measurement.

**30.12.3.1.18o aLldpXdot3RemPowerDownRequest**

BIT STRING [SIZE (8)]

BEHAVIOUR DEFINED AS:

A SET attribute for a bit string that indicates the remote PD system is requesting a power down when the value is 0xDD.

NOT PART OF THE BASELINE: These sections are need to support the new Power via MDI Measurement TLV.

Add Title for the new section:  
Power via MDI Measurements TLV, and renumber the following sections.

**30.12.3.1.18p aLldpXdot3RemPDMeasVoltageSupport**

ATTRIBUTE

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This is an unapproved IEEE Standards draft, subject to change.

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43

APPROPRIATE SYNTAX:

BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A GET attribute that indicates the remote PD is capable of providing a voltage measurement ;

**30.12.3.1.18q aLldpXdot3RemPDMeasCurrentSupport**

50  
51

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5

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A GET attribute that indicates the remote PD is capable of providing a current measurement.;

6

**30.12.3.1.18r aLldpXdot3RemPDMeasEnergySupport**

7

8

5

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (1)]

BEHAVIOUR DEFINED AS:

A GET attribute that indicates the remote PD is capable of providing an energy measurement.;

**30.12.3.1.18s aLldpXdot3RemPDMeasurementSource**

16

17

25

ATTRIBUTE

APPROPRIATE SYNTAX:

BIT STRING [SIZE (2)]

BEHAVIOUR DEFINED AS:

A SET attribute value that indicates to remote PSE on what Alternative the measurement is to be taken .;

**30.12.3.1.18t aLldpXdot3RemPDMeasurementVoltage**

26

27

ATTRIBUTE

APPROPRIATE SYNTAX:

28

29

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns the measured PD voltage.;

34

35

**30.12.3.1.18u aLldpXdot3RemPDMeasurementCurrent**

ATTRIBUTE

APPROPRIATE SYNTAX:

36

37

38

39

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns the measured PD current.;

44

**30.12.3.1.18v aLldpXdot3RemPDMeasurementEnergy**

45

ATTRIBUTE

APPROPRIATE SYNTAX:

46

47

48

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns the measured PD energy.;

BEHAVIOUR DEFINED AS:

1



	2
	3
<b>30.12.3.1.18w aLldpXdot3RemPSEMeasVoltageSupport</b>	4
ATTRIBUTE	5
APPROPRIATE SYNTAX:	6
BIT STRING [SIZE (1)]	7
BEHAVIOUR DEFINED AS:	
A read-only attribute that returns a bit string indicating whether the remote PSE system supports voltage measurements.;	
<b>30.12.3.1.18x aLldpXdot3RemPSEMeasCurrentSupport</b>	13
ATTRIBUTE	14
APPROPRIATE SYNTAX:	15
BIT STRING [SIZE (1)]	16
BEHAVIOUR DEFINED AS:	17
A read-only attribute that returns a bit string indicating whether the remote PSE system supports current measurements.	
	22
<b>30.12.3.1.18y aLldpXdot3RemPSEMeasEnergySupport</b>	23
ATTRIBUTE	24
APPROPRIATE SYNTAX:	25
TBD	26
BEHAVIOUR DEFINED AS:	27
TBD, please comment;	28
	29
<b>30.12.3.1.18z aLldpXdot3RemPSEMeasurementSource</b>	30
ATTRIBUTE	31
APPROPRIATE SYNTAX:	32
BIT STRING [SIZE (1)]	33
BEHAVIOUR DEFINED AS:	34
A read-only attribute that returns a bit string indicating whether the local PSE system supports energy measurements.;	35
	36
<b>30.12.3.1.18aa aLldpXdot3RemPSEMeasurementVoltage</b>	41
ATTRIBUTE	42
APPROPRIATE SYNTAX:	43
INTEGER	44
BEHAVIOUR DEFINED AS:	45
A GET attribute that returns the measured PSE voltage.;	
	50
<b>30.12.3.1.18ab aLldpXdot3RemPSEMeasurementCurrent</b>	51
ATTRIBUTE	52
	53
	54

APPROPRIATE SYNTAX:	1
INTEGER	
BEHAVIOUR DEFINED AS:	
AGET attribute that returns the measured PSE current.;	
<b>30.12.3.1.18ac aLldpXdot3RemPSEMeasurementEnergy</b>	6
ATTRIBUTE	7
APPROPRIATE SYNTAX:	8
INTEGER	9
BEHAVIOUR DEFINED AS:	10
AGET attribute that returns the measured PSE energy.;	
<b>30.12.3.1.18ad aLldpXdot3RemPSEPowerPriceIndex</b>	15
ATTRIBUTE	16
APPROPRIATE SYNTAX:	17
INTEGER	18
BEHAVIOUR DEFINED AS:	19
AGET attribute that returns the PSE Power Price Index.;	20
	24
	25
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NOT PART OF THE BASELINE:

**Additional BASELINE to fix Management issues: Provide Editor with the permission to locate this section correctly.**

**IEEE Clause 30 and 79 text references RFC 3621 as the definition, which is no longer correct. IEEE Std 802.3.1-2013 states in Clause 1 'Overview' that 'This document supersedes and makes obsolete ... IETF RFC 3621 ...'.**

**SOLUTION**

**Clause 30 changes have removed references to RFC 3621.**

**Page 219 existing text,**

**"The PSE power pair field shall contain an integer value as defined by the pethPsePortPowerPairs object in IETF RFC 3621."**

**shall be replaced by adding to clause 79 as of a result of a TDL assigned to Fred Schindler and additions to clause 30 as of a result of a TDL assigned to David Law.**

=== RFC 3621 text likely to be used:

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 802.3af [Section 30.9.1.1.3](#)

aPSEPowerPairsControlAbility"

::= { pethPsePortEntry 4 }

pethPsePortPowerPairs OBJECT-TYPE

SYNTAX INTEGER {

signal(1),

spare(2)

}

MAX-ACCESS read-write

STATUS current

DESCRIPTION

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

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."

REFERENCE

"IEEE Std 802.3af [Section 30.9.1.1.4](#) aPSEPowerPairs"

::= { pethPsePortEntry 5 }

pethPsePortDetectionStatus OBJECT-TYPE

SYNTAX INTEGER {

disabled(1),

searching(2),

deliveringPower(3),

fault(4),

test(5),

otherFault(6)

}

Berger & Romascanu Standards Track [Page 7]

[RFC 3621](#) Power Ethernet MIB December 2003

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 deliveringPower(3) - indicates that the PSE State diagram is in the state POWER\_ON for a duration greater than tlim max (see IEEE Std 802.3af Table 33-5 tlim).

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.  
A value of searching(2)- indicates the PSE State diagram is in a state other than those listed above."  
REFERENCE  
"IEEE Std 802.3af [Section 30.9.1.1.5](#)  
aPSEPowerDetectionStatus"  
 ::= { 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."  
 ::= { pethPsePortEntry 7 }

NOT PART OF THE BASELINE: Moved the sections, below, to support the new Measurement TLV. Comments can be used to fix remaining errors. The Editor should be given permission to renumber the sections below.

*Insert 30.12.2.1.18a through 30.12.2.1.18d after 30.12.3.1.18 as follows:*

**30.12.2.1.18a aLldpXdot3LocPDMeasuredVoltageValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PD measured voltage value. For a PD, it is the measured voltage value that the PD has currently measured and sent to the remote system. PD measured voltage value is the voltage measured at its PI. The PD measured voltage value is encoded according to Table 79–7f, where *X* is the decimal value of aLldpXdot3LocPDMeasuredVoltageValue.;

**30.12.2.1.18b aLldpXdot3LocPDMeasuredCurrentValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PD measured current value. For a PD, it is the measured current value that the PD has currently measured and sent to the remote system. PD measured current value is the current measured at its PI. The PD measured current value is encoded according to Table 79–7f, where *X* is the decimal value of aLldpXdot3LocPDMeasuredCurrentValue.;

**30.12.2.1.18c aLldpXdot3LocPSEMeasuredVoltageValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PSE measured voltage value. For a PSE, it is the measured voltage value that the PSE has currently measured and sent to the remote system. PSE measured voltage value is the voltage measured at its PI. The PSE measured voltage value is encoded according to Table 79–7g, where *X* is the decimal value of aLldpXdot3LocPSEMeasuredVoltageValue.;

**30.12.2.1.18d aLldpXdot3LocPSEMeasuredCurrentValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PSE measured current value. For a PSE, it is the measured current value that the PSE has currently measured and sent to the remote system. PSE measured current value is the current measured at its PI. The PSE measured current value is encoded according to Table 79–7g, where *X* is the decimal value of aLldpXdot3LocPSEMeasuredCurrentValue.;

*Insert 30.12.3.1.18a through 30.12.3.1.18g after 30.12.2.1.18 as follows:*

**30.12.3.1.18a aLdpXdot3RemPDMeasuredVoltageValue**

46

ATTRIBUTE

47

APPROPRIATE SYNTAX:

48

INTEGER

49

50

BEHAVIOUR DEFINED AS:

51

A GET attribute that returns PD measured voltage received from the remote system by a PSE. The definition and encoding of PD measured voltage value is the same as described in

52

53

54

aLldpXdot3LocPDMeasuredVoltageValue 30.12.2.1.18a.;

### **30.12.3.1.18b aLldpXdot3RemPDMeasuredCurrentValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PD measured current received from the remote system by a PSE. The definition and encoding of PD measured current value is the same as described in aLldpXdot3LocPDMeasuredCurrentValue 30.12.2.1.18b.;

### **30.12.3.1.18c aLldpXdot3RemPSEMeasuredVoltageValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PSE measured voltage received from the remote system by a PD. The definition and encoding of PSE measured voltage value is the same as described in aLldpXdot3LocPSEMeasuredVoltageValue 30.12.2.1.18c.;

### **30.12.3.1.18d aLldpXdot3RemPSEMeasuredCurrentValue**

ATTRIBUTE

APPROPRIATE SYNTAX:

INTEGER

BEHAVIOUR DEFINED AS:

A GET attribute that returns PSE measured current received from the remote system by a PD. The definition and encoding of PSE measured current value is the same as described in aLldpXdot3LocPSEMeasuredCurrentValue 30.12.2.1.18d.;