A P P E N D I X **E**

Real-Time Counters

Real-time counters (RTCs) are available through the Diagnostics Center. When the GUI displays the RTCs, the applicability rules would be evaluated by the Cisco MGM server, and the counters will appear in the GUI only if the counters are applicable for the selected entity.

This appendix includes the following information:

E.1 AXSM-Card—Supported Real-Time Counters

No Real-Time Counters supported for the AXSM-Card

E.2 AXSM-DS1-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Line Alarm Statistics—cardFamily EQ VXSM

Table E-1   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUknnVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUknnVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-2   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	dsx1CurrentESs	The number of Errored Seconds.
All Versions	SESs	dsx1CurrentSESs	The number of Severely Errored Seconds.
All Versions	SEFSs	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
All Versions	UASs	dsx1CurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
All Versions	PCVs	dsx1CurrentPCVs	The number of Path Coding Violations.
All Versions	LESs	dsx1CurrentLESs	The number of Line Errored Seconds.
cardFcType EQ 602	BESs	dsx1CurrentBESs	The number of Bursty Errored Seconds.
All Versions	LCVs	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
All Versions	ESs (Far End)	dsx1FarEndCurrentESs	The number of Far End Errored Seconds.
All Versions	SESs (Far End)	dsx1FarEndCurrentSESs	The number of Far End Severely Errored Seconds.
All Versions	SEFSs (Far End)	dsx1FarEndCurrentSEFSs	The number of Far End Severely Errored Framing Seconds.
All Versions	UASs (Far End)	dsx1FarEndCurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs (Far End)	dsx1FarEndCurrentCSSs	The number of Far End Controlled Slip Seconds.
All Versions	LESs (Far End)	dsx1FarEndCurrentLESs	The number of Far End Line Errored Seconds.
All Versions	PCVs (Far End)	dsx1FarEndCurrentPCVs	The number of Far End Path Coding Violations.
cardFcType EQ 602	BESs (Far End)	dsx1FarEndCurrentBESs	The number of Far End Bursty Errored Seconds.

Table E-3   Line Alarm Statistics—cardFamily EQ VXSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	LOS Count	cds1LOSCounts	The number of times the Loss Of Signal defect was detected with or without integrating to LOS alarm.
All Versions	OOF Count	cds1OOFCounts	The number of times the Out of Frame (OOF) was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds1RAICounts	The number of times Yellow Alarms was detected with or without integrating to RAI alarm.
All Versions	FE Count	cds1FECounts	The number of Framing Pattern Errors encountered by the DS1 interface.

E.3 AXSM-DS3-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12
- Line Alarm Statistics
- PLCP Counters—cardFcType not equal to 160

Table E-4   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.

Table E-4   ATM Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-5   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	PESs	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
cardFamily not equal to AXSMXG	PSESs	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.

Table E-5   Line Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	SEFSs	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
All Versions	UASs	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
cardFamily not equal to AXSMXG	LCVs	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
cardFamily not equal to AXSMXG	PCVs	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.
cardFamily not equal to AXSMXG	LESs	dsx3CurrentLESs	The number of Line Errored Seconds.
All Versions	CCVs	dsx3CurrentCCVs	The number of C-bit Coding Violations.
All Versions	CESs	dsx3CurrentCESs	The number of C-bit Errored Seconds.
All Versions	CSESs	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CESs (Far End)	dsx3FarEndCurrentCESs	The counter associated with the number of Far Far End C-bit Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CSESs (Far End)	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.

Table E-5   Line Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CCVs (Far End)	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	UASs (Far End)	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.

Table E-6   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12

Applicability	Counter Name	MIB Object Name	Description
All Versions	LCVs	cds3LCVCurrent24Hr	The number of LCVs encountered by the line since the start of current 24 hour period.
All Versions	LCVs	cds3LCVCurrent24Hr	The number of LCVs encountered by the line since the start of current 24 hour period.
All Versions	LESs	cds3LESCurrent24Hr	The number LESs encountered by the line since the start of current 24 hour period.
All Versions	PCVs	cds3PCVCurrent24Hr	The number PCVs encountered by the line since the start of current 24 hour period.
All Versions	PESs	cds3PESCurrent24Hr	The number of PESs encountered by the line since the start of current 24 hour period.
All Versions	PSESs	cds3PSESCurrent24Hr	The number of PSESs encountered by the line since the start of current 24 hour period.
All Versions	SEFSs	cds3SEFSCurrent24Hr	The number of SEFSs encountered by the line since the start of the current 24 hour period.

Table E-6   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12 (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	UASs	cds3UASCurrent24Hr	The number of UASs encountered by the line since the start of current 24 hour period.
All Versions	CCVs	cds3CCVCurrent24Hr	The number CCVs encounterd by the line since the start of current 24 hour period.
All Versions	CESs	cds3CESCurrent24Hr	The number of CESs encountered by the line since the start of current 24 hour period.
All Versions	CSESs	cds3CSESCurrent24Hr	The number of CSESs encountered by the line since th start of current 24 hour period.
All Versions	LSESs	cds3LSESCurrent24Hr	The number of LSESs (Line severedly errored seconds) encountered by the line since the start of current 24 hour period.

Table E-7   Line Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	LOS Count	cds3RcvLOSCount	The number of times Loss of Signal was detected with or without integrating to LOS alarm.
cardFamily not equal to AXSMXG	OOF Count	cds3RcvOOFCount	The number of times Out of Frame was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds3RAICount	The number of timesRemote Alarm Indication was detected with or without integrating to RAI alarm.
All Versions	CCV Count	cds3CCVCount	The counter associated with the number of C-Bit Coding Violations encountered by a T3/E3 interface.

Table E-7   Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FE Count	cds3FECount	The number of Framing Errors encountered by a T3/E3 interface.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	EXZS Count	cds3EXZSCount	The number of Excessive Zeros(EXZ) by a T3/E3 interface. An EXZ is the occurrence of any string of zeros having length equal to or greater than 3 for B3ZS, or any string of zeros having length greater than 4 for HDB3.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	LCV Count	cds3LCVCount	The count of both BPVs(Bipolar Violations) and EXZs(Excessive Zeros) encountered by a T3/E3 interface.An EXZ increments the LCV by one regardless of the length of the zero string.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	PCV Count	cds3PCVCount	This is the count of P-bit Coding Violation(PCV) error event encountered by DS3 interface. For all DS3 applications, a coding violation error event is a P-bit Parity Error(PERR) event. The parity errors occur when the calculated parity in the information bits of the DS3 frame does not match up with an expected parity value.

Table E-7   Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	CPE Count	cds3CPECount	The number of C-bit parity errors(CPERR) on a DS3 interface. This value is calculated over noninformation bits in the DS3 frame.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FEBE Count	cds3FEBECount	The number of Far End Block Errors(FEBE) encountered by a T3/E3 interface.These include frame alignment errors, multiframe alignment errors, and C-bit parity errors. These errors are generated by the transmitter at the far end, and indicate that the transmitter,cabling or the upstream node is faulty.
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to SRM AND cardFamily not equal to MPSM	AIS Count	cds3RcvAISCount	The number of times Alarm Indication Signals(AIS) were detected. The AIS indicates that an upstream failure has been detected by the far end.

Table E-8   PLCP Counters—cardFcType not equal to 160

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentBIP-8CV	cds3PlcpBip8CVCurrent	The number of BIP-8 code violations (CV) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8CV	cds3PlcpBip8CV24HrBucket	The number of BIP-8 CVs encountered by the line in the last 24 hours.

Table E-8   PLCP Counters—cardFcType not equal to 160 (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentBIP-8ES	cds3PlcpBip8ESCurrent	The number of BIP-8 Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8ES	cds3PlcpBip8ES24HrBucket	The number of BIP-8 ES encountered by the line in the last 24 hour.
All Versions	CurrentBIP-8SES	cds3PlcpBip8SESCurrent	The number of BIP-8 Severely Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8SES	cds3PlcpBip8SES24HrBucket	The number of BIP-8 SES encountered by the line in the last 24 hour.
All Versions	CurrentSEFs	cds3PlcpSEFSCurrent	The number of BIP-8 Severely Errored Framing Seconds(SEFS) encountered by the line in the current 15-minute period.
All Versions	Current24HrSEFs	cds3PlcpSEFS24HrBucket	The number of BIP-8 SEFS encountered by the line in the last 24 hour.
All Versions	CurrentUAS	cds3PlcpUASCurrent	The number of Unavailable Seconds(UAS) encountered by the line in the current 15-minute period.
All Versions	Current24HrUAS	cds3PlcpUAS24HrBucket	The number of BIP-8 UAS encountered by the line in the last 24 hour.
cardFamily EQ AXSME	BIP-8 Errors	cds3PlcpRcvBip8Count	The number of of BIP-8 errors encountered by the line.
All Versions	Num Of OOF	cds3PlcpRcvOOFCount	The number of times Out of Frame(OOF) was detected with or without integrating to OOF alarm.
cardFamily EQ AXSM AND cardFamily EQ AXSME	Num of RAI	cds3PlcpRcvRAICount	The number of times Remote Alarm Indication(RAI) was detected with or without integrating to RAI alarm.
cardFamily EQ AXSME	Num of FE Count	cds3PlcpFECount	The number of Framing Errors detected.
cardFamily EQ AXSME	Num of FESec	cds3PlcpFESecCount	The number of Framing Error errored seconds.
cardFamily EQ AXSME	Num of SEFESec	cds3PlcpSEFSecCount	The number of Severely errored Framing error seconds.

Table E-8   PLCP Counters—cardFcType not equal to 160 (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily EQ AXSME	Num of FEBE	cds3PlcpFEBECount	The count of Far End Block Errors (FEBE) detected.
cardFamily EQ AXSME	Num of FEBESec	cds3PlcpFEBESecCount	The number of FEBE errored seconds.
cardFamily EQ AXSME	Num of SEFEBESec	cds3PlcpSEFEBESecCount	The number of Severely errored FEBE seconds.

E.4 AXSM-EndPoint-Connection—Supported Real-Time Counters

This section includes the following information:

- ATM Connection Statistics

Table E-9   ATM Connection Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv CLP0 (Ingress)	cwacsIngRcvCLP0	Ingress Rcv CLP0
All Versions	Rcv CLP1 (Ingress)	cwacsIngRcvCLP1	Ingress Rcv CLP1
All Versions	CLP0 UPC Discard (Ingress)	cwacsIngCLP0UpcDiscard	Ingress CLP0 UPC Discard
All Versions	CLP1 UPC Discard (Ingress)	cwacsIngCLP1UpcDiscard	Ingress CLP1 UPC Discard
All Versions	CLP0 UPC Tagged (Ingress)	cwacsIngCLP0UpcTagged	Ingress CLP0 UPC Tagged
All Versions	Rcv EFCI1 (Ingress)	cwacsIngRcvEFCI1	Ingress Rcv EFCI1
All Versions	Rcv EOF1(Ingress)	cwacsIngRcvEOF1	Ingress Rcv EOF1
All Versions	Queue Depth (Ingress)	cwacsIngVCQueueDepth	Ingress Queue Depth
All Versions	Rcv CLP0 (Egress)	cwacsEgrRcvCLP0	Egress Rcv CLP0
All Versions	Rcv CLP1 (Egress)	cwacsEgrRcvCLP1	Egress Rcv CLP1
All Versions	Rcv EFCI1 (Egress)	cwacsEgrRcvEFCI1	Egress Rcv EFCI1
cardFamily EQ AXSM	Rcv EOF1 (Egress)	cwacsEgrRcvEOF1	Egress Rcv EOF1
All Versions	Queue Depth (Egress)	cwacsEgrVCQueueDepth	Egress Queue Depth

E.5 AXSM-Port—Supported Real-Time Counters

This section includes the following information:

- Port Counters
- Call Statistics—evaluate_isPnPortPresent
- Load Statistics—evaluate_isPnPortPresent
- Signalling Statistics—evaluate_isPnPortPresent

Table E-10   Port Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv CLP0 Cells (Ingress)	caviIngRcvClp0Cells	The number of CLP-0 cells received from network at the traffic management and policing device in ingress direction.
All Versions	Rcv CLP0 Cells (Egress)	caviEgrRcvClp0Cells	The number of CLP-0 cells received from switch at the traffic management and policing device.
All Versions	Rcv CLP1 Cells (Ingress)	caviIngRcvClp1Cells	The number of CLP-1 cells received from network at the traffic management and policing device in ingress direction.
All Versions	Rcv CLP1 Cells (Egress)	caviEgrRcvClp1Cells	The number of CLP-1 cells received from switch at the traffic management and policing device.
All Versions	CLP0 Discarded Cells (Ingress)	caviIngClp0DiscCells	The number of CLP-0 cells discarded due to policing in ingress direction.
All Versions	CLP0 Cells Discarded Cells (Egress)	caviEgrClp0DiscCells	The number of CLP-0 cells discarded due to policing.
All Versions	CLP1 Discarded Cells (Ingress)	caviIngClp1DiscCells	The number of CLP-1 cells discarded due to policing in ingress direction.
All Versions	CLP1 Discarded Cells (Egress)	caviEgrClp1DiscCells	The number of CLP-1 cells discarded due to policing.
All Versions	Xmt CLP0 Cells (Ingress)	caviIngXmtClp0Cells	The number of CLP-0 cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt CLP0 Cells (Egress)	caviEgrXmtClp0Cells	The number of CLP-0 cells transmitted to the network after traffic management and policing.

Table E-10   Port Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Xmt CLP1 Cells (Ingress)	caviIngXmtClp1Cells	The number of CLP-1 cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt CLP1 Cells (Egress)	caviEgrXmtClp1Cells	The number of CLP-1 cells transmitted to the network after traffic management and policing.

Table E-11   Call Statistics—evaluate_isPnPortPresent

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Call Attempts	cwspInCallAttempts	This object shows the number of incoming Signaling messages (Setup and Add Party) received by the switching node on this interface for Call establishment.
All Versions	In Call Estabs	cwspInCallEstabs	This object shows the number of incoming Signaling Messages (Connect and Add Party Ack) received by the switching node on this interface which marks that a call has been successfully established.
All Versions	In Call Failures	cwspInCallFailures	This object shows the total number of incoming Point-to-Point (p2p) and Point-to-MultiPoint(p2mp) SVC/SPVC call attempts failed on this interface.
All Versions	In Filter Failures	cwspInFilterFailures	This object shows the number of incoming Point-to-Point(p2p) and Point-to-MultiPoint(p2mp) SVC/SPVC call attempts which failed due to address filtering on this interface.
All Versions	In Route Failures	cwspInRouteFailures	This object shows the number of incoming Point-to-Point(p2p) and Point-to-MulitPoint(p2mp) SVC/SPVC call attempts on this interface which failed because there was no route to the destination available.

Table E-11   Call Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Resource Failures	cwspInResrcFailures	This object shows the number of incoming Point-to-Point(p2p) and Point-to-MulitPoint(p2mp) SVC/SPVC call attempts on this interface which failed because there were not enough resources as requested in the parameters of the call.
All Versions	In Timer Failures	cwspInTimerFailures	This object shows the number of signaling timers timed out for incoming Point-to-Point(p2p) and Point-to-MultiPoint(p2mp) SVC/SPVC calls on this interface.
All Versions	In Crankbacks	cwspInCrankbacks	This object shows the number of Crankback IEs received on this interface for incoming Point-to-Point(p2p) and Point-to-MultiPoint (p2mp) SVC/SPVC call attempts.
All Versions	Out Call Attempts	cwspOutCallAttempts	This object shows the number of outgoing Signaling messages (Setup and Add Party) on this interface for Call establishment.
All Versions	Out Call Estabs	cwspOutCallEstabs	This object shows the number of outgoing Signaling messages (Connect and Add Party Ack) which mark the call being established on this interface
All Versions	Out Call Failures	cwspOutCallFailures	This object shows the total number of outgoing Signaling messages for Point-to-Point and Point-to-MultiPoint call establishment on this interface which failed.
All Versions	Out Filter Failures	cwspOutFilterFailures	This object shows the number of outgoing Signaling messages for call establishment on this interface which failed the address filtering.
All Versions	Out Route Failures	cwspOutRouteFailures	This object shows the number of outgoing Signaling messages for call establishment on this interface which failed because the route was not available.

Table E-11   Call Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Out Resource Failures	cwspOutResrcFailures	This object shows the number of outgoing Signaling messages for call establishment on this interface which failed because the resource requested was not available.
All Versions	Out Timer Failures	cwspOutTimerFailures	This object shows the number of Signaling timers timed-out on this interface for outgoing signaling messages.
All Versions	Out Crankbacks	cwspOutCrankbacks	This object shows the number of Crankback IEs being sent on this interface for outgoing signaling Release messages. This is generated on the node which generates the Crankback IEs.

Table E-12   Load Statistics—evaluate_isPnPortPresent

Applicability	Counter Name	MIB Object Name	Description
All Versions	BW Total	cwspLoadBwTotal	The total bandwidth of the interface.
All Versions	Max BW CBR	cwspLoadMaxBwCbr	The Maximum bandwith for CBR service.
All Versions	Max BW Real-Time VBR	cwspLoadMaxBwRtVbr	The maximum bandwith for real-time VBR service.
All Versions	Max BW Non Real-Time VBR	cwspLoadMaxBwNrtVbr	The maximum bandwith for non-real-time VBR service.
All Versions	Max BW ABR	cwspLoadMaxBwAbr	The maximum bandwith for ABR service.
All Versions	Max BW UBR	cwspLoadMaxBwUbr	The maximum bandwith for UBR service.
All Versions	BW Available	cwspLoadBwAvail	The total available bandwidth of the interface.
All Versions	Available BW CBR	cwspLoadAvlBwCbr	The available bandwith for CBR service.
All Versions	Avaliable BW Real-Time VBR	cwspLoadAvlBwRtVbr	The available bandwith for real-time VBR service.
All Versions	Available BW Non Real-Time VBR	cwspLoadAvlBwNrtVbr	The available bandwith for non-real-time VBR service.
All Versions	Available BW ABR	cwspLoadAvlBwAbr	The available bandwith for ABR service.

Table E-12   Load Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Available BW UBR	cwspLoadAvlBwUbr	The available bandwith for UBR service.
All Versions	Available VCs	cwspLoadVcAvail	The total number of available VCs of the interface.
All Versions	Avaailable VCs CBR	cwspLoadAvlVcCbr	The number of VCs used by CBR service.
All Versions	Available VCs Real-Time VBR	cwspLoadAvlVcRtVbr	The number of VCs used by real-time VBR service.
All Versions	cwspLoadAvlVcNrtVbr	cwspLoadAvlVcNrtVbr	The number of VCs used by non-real-time VBR service.
All Versions	cwspLoadAvlVcAbr	cwspLoadAvlVcAbr	The number of VCs used by ABR service.
All Versions	cwspLoadAvlVcUbr	cwspLoadAvlVcUbr	The number of VCs used by UBR service.
All Versions	cwspLoadCtdCbr	cwspLoadCtdCbr	The cell transfer delay of CBR service.
All Versions	cwspLoadCtdRtVbr	cwspLoadCtdRtVbr	The cell transfer delay of real-time VBR service.
All Versions	cwspLoadCtdNrtVbr	cwspLoadCtdNrtVbr	The cell transfer delay of non-real-time VBR service.
All Versions	cwspLoadCtdAbr	cwspLoadCtdAbr	The cell transfer delay of ABR service.
All Versions	cwspLoadCtdUbr	cwspLoadCtdUbr	The cell transfer delay of UBR service.
All Versions	cwspLoadCdvCbr	cwspLoadCdvCbr	The cell delay variation of CBR service.
All Versions	cwspLoadCdvRtVbr	cwspLoadCdvRtVbr	The cell delay variation of real-time VBR service.
All Versions	cwspLoadCdvNrtVbr	cwspLoadCdvNrtVbr	The cell delay variation of non-real-time VBR service.
All Versions	cwspLoadCdvAbr	cwspLoadCdvAbr	The cell delay variation of ABR service.
All Versions	cwspLoadCdvUbr	cwspLoadCdvUbr	The cell delay variation of UBR service.
All Versions	cwspLoadClr0Cbr	cwspLoadClr0Cbr	The cell loss ratio-0 of CBR service, -1 implies N/A.
All Versions	cwspLoadClr0RtVbr	cwspLoadClr0RtVbr	The cell loss ratio-0 of real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr0NrtVbr	cwspLoadClr0NrtVbr	The cell loss ratio-0 of non-real-time VBR service, -1 implies N/A.

Table E-12   Load Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspLoadClr0Abr	cwspLoadClr0Abr	The cell loss ratio-0 of ABR service, -1 implies N/A.
All Versions	cwspLoadClr0Ubr	cwspLoadClr0Ubr	The cell loss ratio-0 of UBR service, -1 implies N/A.
All Versions	cwspLoadClr01Cbr	cwspLoadClr01Cbr	The cell loss ratio-1 of CBR service, -1 implies N/A.
All Versions	cwspLoadClr01RtVbr	cwspLoadClr01RtVbr	The cell loss ratio-1 of real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr01NrtVbr	cwspLoadClr01NrtVbr	The cell loss ratio-1 of non-real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr01Abr	cwspLoadClr01Abr	The cell loss ratio-1 of ABR service, -1 implies N/A.
All Versions	cwspLoadClr01Ubr	cwspLoadClr01Ubr	The cell loss ratio-1 of UBR service, -1 implies N/A.
All Versions	cwspLoadMinGurCrCbr	cwspLoadMinGurCrCbr	The minimum guaranteed cell rate capacity of CBR service.
All Versions	cwspLoadMinGurCrRtVbr	cwspLoadMinGurCrRtVbr	The minimum guaranteed cell rate capacity of real-time VBR service.
All Versions	cwspLoadMinGurCrNrtVbr	cwspLoadMinGurCrNrtVbr	The minimum guaranteed cell rate capacity of non-real-time VBR service.
All Versions	cwspLoadMinGurCrAbr	cwspLoadMinGurCrAbr	The minimum guaranteed cell rate capacity of ABR service.
All Versions	cwspLoadMinGurCrUbr	cwspLoadMinGurCrUbr	The minimum guaranteed cell rate capacity of UBR service.

Table E-13   Signalling Statistics—evaluate_isPnPortPresent

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspCallProcRcv	cwspCallProcRcv	Number of CALL PROCEEDING messages received on this interface.
All Versions	cwspConnectRcv	cwspConnectRcv	Number of CONNECT messages received on this interface.
All Versions	cwspConnectAckRcv	cwspConnectAckRcv	Number of CONNECT ACK messages received on this interface.
All Versions	cwspSetupRcv	cwspSetupRcv	Number of SETUP messages received on this interface.

Table E-13   Signalling Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspReleaseRcv	cwspReleaseRcv	Number of RELEASE messages received on this interface.
All Versions	cwspReleaseComplRcv	cwspReleaseComplRcv	Number of RELEASE COMPLETE messages received on this interface.
All Versions	cwspRestartRcv	cwspRestartRcv	Number of RESTART messages received on this interface.
All Versions	cwspRestartAckRcv	cwspRestartAckRcv	Number of RESTART ACK messages received on this interface.
All Versions	cwspStatusRcv	cwspStatusRcv	Number of STATUS messages received on this interface.
All Versions	cwspStatusEnqRcv	cwspStatusEnqRcv	Number of STATUS ENQUIRY messages received on this interface.
All Versions	cwspNotifyRcv	cwspNotifyRcv	Number of NOTIFY messages received on this interface.
All Versions	cwspAlertRcv	cwspAlertRcv	Number of ALERT messages received on this interface.
All Versions	cwspProgressRcv	cwspProgressRcv	Number of PROGRESS messages received on this interface.
All Versions	cwspAddPtyRcv	cwspAddPtyRcv	Number of ADD PARTY messages received on this interface.
All Versions	cwspAddPtyAckRcv	cwspAddPtyAckRcv	Number of ADD PARTY ACK messages received on this interface.
All Versions	cwspAddPtyRejRcv	cwspAddPtyRejRcv	Number of ADD PARTY REJECT messages received on this interface.
All Versions	cwspDropPtyRcv	cwspDropPtyRcv	Number of DROP PARTY messages received on this interface.
All Versions	cwspIncorrectMsgRcv	cwspIncorrectMsgRcv	Number of Incorrect messages received on this interface.
All Versions	cwspTimerExpiries	cwspTimerExpiries	Number of timeouts occurred on this interface.
All Versions	cwspLastCause	cwspLastCause	to indicate the last cause of release or cranckback.
All Versions	cwspLastDiagnostic	cwspLastDiagnostic	to indicate the last diagnostic of release or cranckback.

Table E-13   Signalling Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspCallProcXmt	cwspCallProcXmt	Number of CALL PROCEEDING messages transmitted from this interface.
All Versions	cwspConnectXmt	cwspConnectXmt	Number of CONNECT messages transmitted from this interface.
All Versions	cwspConnectAckXmt	cwspConnectAckXmt	Number of CONNECT ACK messages transmitted from this interface.
All Versions	cwspSetupXmt	cwspSetupXmt	Number of SETUP messages transmitted from this interface.
All Versions	cwspReleaseXmt	cwspReleaseXmt	Number of RELEASE messages transmitted from this interface.
All Versions	cwspReleaseComplXmt	cwspReleaseComplXmt	Number of RELEASE COMPLETE messages transmitted from this interface.
All Versions	cwspRestartXmt	cwspRestartXmt	Number of RESTART messages transmitted from this interface.
All Versions	cwspRestartAckXmt	cwspRestartAckXmt	Number of RESTART ACK messages transmitted from this interface.
All Versions	cwspStatusXmt	cwspStatusXmt	Number of STATUS messages transmitted from this interface.
All Versions	cwspStatusEnqXmt	cwspStatusEnqXmt	Number of STATUS ENQUIRY messages transmitted from this interface.
All Versions	cwspNotifyXmt	cwspNotifyXmt	Number of NOTIFY messages transmitted from this interface.
All Versions	cwspAlertXmt	cwspAlertXmt	Number of ALERT messages transmitted from this interface.
All Versions	cwspProgressXmt	cwspProgressXmt	Number of PROGRESS messages transmitted from this interface.
All Versions	cwspAddPtyXmt	cwspAddPtyXmt	Number of ADD PARTY messages transmitted from this interface.
All Versions	cwspAddPtyAckXmt	cwspAddPtyAckXmt	Number of ADD PARTY ACK messages transmitted from this interface.
All Versions	cwspAddPtyRejXmt	cwspAddPtyRejXmt	Number of ADD PARTY REJECT messages transmitted from this interface.

Table E-13   Signalling Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspDropPtyXmt	cwspDropPtyXmt	Number of DROP PARTY messages transmitted from this interface.
All Versions	cwspSscopStatus	cwspSscopStatus	Sscop link status on an NNI interface, object is meaningful along with ciscoWANSscopLinkChange trap.

E.6 AXSM-SONET-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Section Current Counters
- Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM
- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM
- Section Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM
- Alarm Statistics

Table E-14   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.

Table E-14   ATM Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	aclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-15   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	SESs	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	CVs	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	UASs	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-16   Section Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SESs	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SEFSs	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	CVs	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-17   Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.

Table E-17   Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-18   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsLineCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsLineCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsLineCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsLineCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
All Versions	ESs (Far End)	cwsFELineCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
All Versions	SESs (Far End)	cwsFELineCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.

Table E-18   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CVs (Far End)	cwsFELineCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
All Versions	UASs (Far End)	cwsFELineCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-19   Section Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsSectionCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsSectionCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	SEFs	cwsSectionCurrent24HrSEFSs	Number of SEFSs encountered in current 24 hour interval.
All Versions	CVs	cwsSectionCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.

Table E-20   Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.

*Table E-20   Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG
AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM (continued)*

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-21   Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Section LOSs	cssLOSs	The number of Loss of signals(LOS) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Section LOFs	cssLOFs	The number of Loss of Frames (LOF) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Line AISs	cslAISs	The number of alarm indication signals(AIS) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
All Versions	Line RFIs	cslRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.

Table E-21   Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path AISs	cspAISs	The number of alarm indication signals (AIS) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	cspRFIs	cspRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.

E.7 AXSME-Card—Supported Real-Time Counters

No Real-Time Counters supported for the AXSME-Card

E.8 AXSME-DS1-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Line Alarm Statistics—cardFamily EQ VXSM

Table E-22   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.

Table E-22   ATM Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-23   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	dsx1CurrentESs	The number of Errored Seconds.
All Versions	SESs	dsx1CurrentSESs	The number of Severely Errored Seconds.
All Versions	SEFSs	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
All Versions	UASs	dsx1CurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
All Versions	PCVs	dsx1CurrentPCVs	The number of Path Coding Violations.
All Versions	LESs	dsx1CurrentLESs	The number of Line Errored Seconds.
cardFcType EQ 602	BESs	dsx1CurrentBESs	The number of Bursty Errored Seconds.
All Versions	LCVs	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
All Versions	ESs (Far End)	dsx1FarEndCurrentESs	The number of Far End Errored Seconds.
All Versions	SESs (Far End)	dsx1FarEndCurrentSESs	The number of Far End Severely Errored Seconds.
All Versions	SEFSs (Far End)	dsx1FarEndCurrentSEFSs	The number of Far End Severely Errored Framing Seconds.
All Versions	UASs (Far End)	dsx1FarEndCurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs (Far End)	dsx1FarEndCurrentCSSs	The number of Far End Controlled Slip Seconds.
All Versions	LESs (Far End)	dsx1FarEndCurrentLESs	The number of Far End Line Errored Seconds.
All Versions	PCVs (Far End)	dsx1FarEndCurrentPCVs	The number of Far End Path Coding Violations.
cardFcType EQ 602	BESs (Far End)	dsx1FarEndCurrentBESs	The number of Far End Bursty Errored Seconds.

Table E-24   Line Alarm Statistics—cardFamily EQ VXSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	LOS Count	cds1LOSCounts	The number of times the Loss Of Signal defect was detected with or without integrating to LOS alarm.
All Versions	OOF Count	cds1OOFCounts	The number of times the Out of Frame (OOF) was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds1RAICounts	The number of times Yellow Alarms was detected with or without integrating to RAI alarm.
All Versions	FE Count	cds1FECounts	The number of Framing Pattern Errors encountered by the DS1 interface.

E.9 AXSME-DS3-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- Category—Line Current Counters
- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12
- Line Alarm Statistics
- PLCP Counters—cardFcType not equal to 160

Table E-25   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.

Table E-25   *ATM Cell Layer Counters—cellLayer EQ true (continued)*

Applicability	Counter Name	MIB Object Name	Description
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-26   *Category—Line Current Counters*

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	PESs	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
cardFamily not equal to AXSMXG	PSESs	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
cardFamily not equal to AXSMXG	SEFSs	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
All Versions	UASs	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
cardFamily not equal to AXSMXG	LCVs	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
cardFamily not equal to AXSMXG	PCVs	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.
cardFamily not equal to AXSMXG	LESs	dsx3CurrentLESs	The number of Line Errored Seconds.
All Versions	CCVs	dsx3CurrentCCVs	The number of C-bit Coding Violations.
All Versions	CESs	dsx3CurrentCESs	The number of C-bit Errored Seconds.
All Versions	CSESs	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CESs (Far End)	dsx3FarEndCurrentCESs	The counter associated with the number of Far Far End C-bit Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CSESs (Far End)	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CCVs (Far End)	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	UASs (Far End)	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.

Table E-27   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12

Applicability	Counter Name	MIB Object Name	Description
All Versions	LCVs	cds3LCVCurrent24Hr	The number of LCVs encountered by the line since the start of current 24 hour period.
All Versions	LESs	cds3LESCurrent24Hr	The number LESs encountered by the line since the start of current 24 hour period.
All Versions	PCVs	cds3PCVCurrent24Hr	The number PCVs encountered by the line since the start of current 24 hour period.
All Versions	PESs	cds3PESCurrent24Hr	The number of PESs encountered by the line since the start of current 24 hour period.
All Versions	PSESs	cds3PSESCurrent24Hr	The number of PSESs encountered by the line since the start of current 24 hour period.
All Versions	SEFSs	cds3SEFSCurrent24Hr	The number of SEFSs encountered by the line since the start of the current 24 hour period.
All Versions	UASs	cds3UASCurrent24Hr	The number of UASs encountered by the line since the start of current 24 hour period.
All Versions	CCVs	cds3CCVCurrent24Hr	The number CCVs encounterd by the line since the start of current 24 hour period.
All Versions	CESs	cds3CESCurrent24Hr	The number of CESs encountered by the line since the start of current 24 hour period.
All Versions	CSESs	cds3CSESCurrent24Hr	The number of CSESs encountered by the line since th start of current 24 hour period.
All Versions	LSESs	cds3LSESCurrent24Hr	The number of LSESs (Line severedly errored seconds) encountered by the line since the start of current 24 hour period.

Table E-28   Line Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	LOS Count	cds3RcvLOSCount	The number of times Loss of Signal was detected with or without integrating to LOS alarm.
cardFamily not equal to AXSMXG	OOF Count	cds3RcvOOFCount	The number of times Out of Frame was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds3RAICount	The number of timesRemote Alarm Indication was detected with or without integrating to RAI alarm.
All Versions	CCV Count	cds3CCVCount	The counter associated with the number of C-Bit Coding Violations encountered by a T3/E3 interface.

Table E-28   Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FE Count	cds3FECount	The number of Framing Errors encountered by a T3/E3 interface.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	EXZS Count	cds3EXZSCount	The number of Excessive Zeros(EXZ) by a T3/E3 interface. An EXZ is the occurrence of any string of zeros having length equal to or greater than 3 for B3ZS, or any string of zeros having length greater than 4 for HDB3.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	LCV Count	cds3LCVCount	The count of both BPVs(Bipolar Violations) and EXZs(Excessive Zeros) encountered by a T3/E3 interface.An EXZ increments the LCV by one regardless of the length of the zero string.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	PCV Count	cds3PCVCount	This is the count of P-bit Coding Violation(PCV) error event encountered by DS3 interface. For all DS3 applications, a coding violation error event is a P-bit Parity Error(PERR) event. The parity errors occur when the calculated parity in the information bits of the DS3 frame does not match up with an expected parity value.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	CPE Count	cds3CPECount	The number of C-bit parity errors(CPERR) on a DS3 interface. This value is calculated over noninformation bits in the DS3 frame.

Table E-28   Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FEBE Count	cds3FEBECount	The number of Far End Block Errors(FEBE) encountered by a T3/E3 interface.These include frame alignment errors, multiframe alignment errors, and C-bit parity errors. These errors are generated by the transmitter at the far end, and indicate that the transmitter,cabling or the upstream node is faulty.
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to SRM AND cardFamily not equal to MPSM	AIS Count	cds3RcvAISCount	The number of times Alarm Indication Signals(AIS) were detected. The AIS indicates that an upstream failure has been detected by the far end.

Table E-29   PLCP Counters—cardFcType not equal to 160

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentBIP-8CV	cds3PlcpBip8CVCurrent	The number of BIP-8 code violations (CV) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8CV	cds3PlcpBip8CV24HrBucket	The number of BIP-8 CVs encountered by the line in the last 24 hours.
All Versions	CurrentBIP-8ES	cds3PlcpBip8ESCurrent	The number of BIP-8 Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8ES	cds3PlcpBip8ES24HrBucket	The number of BIP-8 ES encountered by the line in the last 24 hour.
All Versions	CurrentBIP-8SES	cds3PlcpBip8SESCurrent	The number of BIP-8 Severely Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8SES	cds3PlcpBip8SES24HrBucket	The number of BIP-8 SES encountered by the line in the last 24 hour.
All Versions	CurrentSEFs	cds3PlcpSEFSCurrent	The number of BIP-8 Severely Errored Framing Seconds(SEFS) encountered by the line in the current 15-minute period.
All Versions	Current24HrSEFs	cds3PlcpSEFS24HrBucket	The number of BIP-8 SEFS encountered by the line in the last 24 hour.

Table E-29   PLCP Counters—cardFcType not equal to 160 (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentUAS	cds3PlcpUASCurrent	The number of Unavailable Seconds(UAS) encountered by the line in the current 15-minute period.
All Versions	Current24HrUAS	cds3PlcpUAS24HrBucket	The number of BIP-8 UAS encountered by the line in the last 24 hour.
cardFamily EQ AXSME	BIP-8 Errors	cds3PlcpRcvBip8Count	The number of of BIP-8 errors encountered by the line.
All Versions	Num Of OOF	cds3PlcpRcvOOFCount	The number of times Out of Frame(OOF) was detected with or without integrating to OOF alarm.
cardFamily EQ AXSM AND cardFamily EQ AXSME	Num of RAI	cds3PlcpRcvRAICount	The number of times Remote Alarm Indication(RAI) was detected with or without integrating to RAI alarm.
cardFamily EQ AXSME	Num of FE Count	cds3PlcpFECount	The number of Framing Errors detected.
cardFamily EQ AXSME	Num of FESec	cds3PlcpFESecCount	The number of Framing Error errored seconds.
cardFamily EQ AXSME	Num of SEFESec	cds3PlcpSEFSecCount	The number of Severely errored Framing error seconds.
cardFamily EQ AXSME	Num of FEBE	cds3PlcpFEBECount	The count of Far End Block Errors (FEBE) detected.
cardFamily EQ AXSME	Num of FEBESec	cds3PlcpFEBESecCount	The number of FEBE errored seconds.
cardFamily EQ AXSME	Num of SEFEBESec	cds3PlcpSEFEBESecCount	The number of Severely errored FEBE seconds.

E.10 AXSME-EndPoint-Connection—Supported Real-Time Counters

This section includes the following information:

- ATM Connection Statistics

Table E-30   ATM Connection Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv CLP0 (Ingress)	cwacsIngRcvCLP0	Ingress Rcv CLP0
All Versions	Rcv CLP1 (Ingress)	cwacsIngRcvCLP1	Ingress Rcv CLP1
All Versions	CLP0 UPC Discard (Ingress)	cwacsIngCLP0UpcDiscard	Ingress CLP0 UPC Discard
All Versions	CLP1 UPC Discard (Ingress)	cwacsIngCLP1UpcDiscard	Ingress CLP1 UPC Discard
All Versions	CLP0 UPC Tagged (Ingress)	cwacsIngCLP0UpcTagged	Ingress CLP0 UPC Tagged

Table E-30   ATM Connection Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv EFCI1 (Ingress)	cwacsIngRcvEFCI1	Ingress Rcv EFCI1
All Versions	Rcv EOF1(Ingress)	cwacsIngRcvEOF1	Ingress Rcv EOF1
All Versions	Queue Depth (Ingress)	cwacsIngVCQueueDepth	Ingress Queue Depth
All Versions	Rcv CLP0 (Egress)	cwacsEgrRcvCLP0	Egress Rcv CLP0
All Versions	Rcv CLP1 (Egress)	cwacsEgrRcvCLP1	Egress Rcv CLP1
All Versions	Rcv EFCI1 (Egress)	cwacsEgrRcvEFCI1	Egress Rcv EFCI1
cardFamily EQ AXSM	Rcv EOF1 (Egress)	cwacsEgrRcvEOF1	Egress Rcv EOF1
All Versions	Queue Depth (Egress)	cwacsEgrVCQueueDepth	Egress Queue Depth

E.11 AXSME-ImaGroup—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- IMA Group Alarm Counters

Table E-31   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.

Table E-31   ATM Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-32   IMA Group Alarm Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Accumulated Delay	cimaGroupAccumulatedDelay	Indicates the amount of data per link that is accumulated in the DCBs of the IMA Group.
All Versions	Running Secs	imaGroupRunningSecs	The amount of time (in seconds) since this IMA group has been in the Operational state.
All Versions	Unavailable Secs	imaGroupUnavailSecs	Count of one second intervals where the IMA Group Traffic State Machine is Down.
All Versions	Near End Num Failures	imaGroupNeNumFailures	The number of times a near-end group failure (Config-Aborted, Insufficient-Links) has been reported since power-up or reboot.
All Versions	Far End Num Failures	imaGroupFeNumFailures	The number of times a far-end group failure (Config-Aborted-FE, Insufficient-Links-FE, Blocked-FE) has been reported since power-up or reboot. This is an optional attribute.

Table E-32   IMA Group Alarm Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Tx Avail Cell rate	imaGroupTxAvailCellRate	The current cell rate (truncated value in cells per second) provided by this IMA group in the transmit direction, considering all the transmit links in the Active state.
All Versions	Rx Avail Cell Rate	imaGroupRxAvailCellRate	The current cell rate (truncated value in cells per second) provided by this IMA group in the receive direction, considering all the receive links in the Active state.

E.12 AXSME-ImaLink—Supported Real-Time Counters

This section includes the following information:

- IMA Link Counters

Table E-33   IMA Link Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	IMA Violations	imaLinkImaViolations	ICP violations: count of errored, invalid or missing ICP cells, except during SES-IMA or UAS-IMA conditions.
All Versions	OIF Anomalies	imaLinkOifAnomalies	The number of OIF anomalies, except during SES-IMA or UAS-IMA conditions, at the near-end. This is an optional attribute.
All Versions	Ne Severely Errored Secs	imaLinkNeSevErroredSecs	Count of one second intervals containing >= 30% of the ICP cells counted as IV-IMAs, or one or more link defects (e.g., LOS, OOF/LOF, AIS, or LCD), LIF defects, or LODS defects, except during UAS-IMA condition.
All Versions	Fe Severely Errored Secs	imaLinkFeSevErroredSecs	Count of one second intervals containing one or more RDI-IMA defects, except during UAS-IMA-FE condition.
All Versions	Ne Unavail Secs	imaLinkNeUnavailSecs	Count of unavailable seconds at near-end: unavailability begins at the onset of 10 contiguous SES-IMA and ends at the onset of 10 contiguous seconds with no SES-IMA.

Table E-33   IMA Link Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Fe Unavail Secs	imaLinkFeUnavailSecs	Count of unavailable seconds at far-end: unavailability begins at the onset of 10 contiguous SES-IMA-FE and ends at the onset of 10 contiguous seconds with no SES-IMA-FE.
All Versions	Ne Tx Unusable Secs	imaLinkNeTxUnusableSecs	Tx Unusable seconds: count of Tx Unusable seconds at the near-end Tx LSM.
All Versions	Ne Rx Unusable Secs	imaLinkNeRxUnusableSecs	Rx Unusable seconds: count of Rx Unusable seconds at the near-end Rx LSM.
All Versions	Fe Tx Unusable Secs	imaLinkFeTxUnusableSecs	Tx Unusable seconds at far-end: count of seconds with Tx Unusable indications from the far-end Tx LSM.
All Versions	Fe Rx Unusable Secs	imaLinkFeRxUnusableSecs	Rx Unusable seconds at far-end: count of seconds with Rx Unusable indications from the far-end Rx LSM.
All Versions	Ne Tx Num Failures	imaLinkNeTxNumFailures	The number of times a near-end transmit failure alarm condition has been entered on this link (i.e., some form of implementation specific transmit fault).
All Versions	Ne Rx Num Failures	imaLinkNeRxNumFailures	The number of times a near-end receive failure alarm condition has been entered on this link (i.e., LIF, LODS, RFI-IMA, Mis-Connected or some form of implementation specific receive fault).
All Versions	Fe Tx Num Failures	imaLinkFeTxNumFailures	The number of times a far-end transmit failure alarm condition has been entered on this link (i.e., Tx-Unusable-FE). This is an optional attribute.
All Versions	Fe Rx Num Failures	imaLinkFeRxNumFailures	The number of times a far-end receive failure alarm condition has been entered on this link (i.e., Rx-Unusable-FE). This is an optional attribute.
All Versions	Tx Stuffs	imaLinkTxStuffs	Count of stuff events inserted in the transmit direction. This is an optional attribute.

Table E-33   IMA Link Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rx Stuffs	imaLinkRxStuffs	Count of stuff events detected in the receive direction. This is an optional attribute.
All Versions	Num Rx ICP Cells	cimaLinkNumRxIcpCells	Number of error-free received ICP cells on this link of the IMA group.

E.13 AXSME-Port—Supported Real-Time Counters

This section includes the following information:

- Port Counters
- Call Statistics—evaluate_isPnPortPresent
- Load Statistics—evaluate_isPnPortPresent
- Signalling Statistics—evaluate_isPnPortPresent
- ATM Cell Layer Counters—cellLayer EQ true

Table E-34   Port Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv CLP0 Cells (Ingress)	caviIngRcvClp0Cells	The number of CLP-0 cells received from network at the traffic management and policing device in ingress direction.
All Versions	Rcv CLP0 Cells (Egress)	caviEgrRcvClp0Cells	The number of CLP-0 cells received from switch at the traffic management and policing device.
All Versions	Rcv CLP1 Cells (Ingress)	caviIngRcvClp1Cells	The number of CLP-1 cells received from network at the traffic management and policing device in ingress direction.
All Versions	Rcv CLP1 Cells (Egress)	caviEgrRcvClp1Cells	The number of CLP-1 cells received from switch at the traffic management and policing device.
All Versions	CLP0 Discarded Cells (Ingress)	caviIngClp0DiscCells	The number of CLP-0 cells discarded due to policing in ingress direction.
All Versions	CLP0 Cells Discarded Cells (Egress)	caviEgrClp0DiscCells	The number of CLP-0 cells discarded due to policing.
All Versions	CLP1 Discarded Cells (Ingress)	caviIngClp1DiscCells	The number of CLP-1 cells discarded due to policing in ingress direction.
All Versions	CLP1 Discarded Cells (Egress)	caviEgrClp1DiscCells	The number of CLP-1 cells discarded due to policing.

Table E-34   Port Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Xmt CLP0 Cells (Ingress)	caviIngXmtClp0Cells	The number of CLP-0 cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt CLP0 Cells (Egress)	caviEgrXmtClp0Cells	The number of CLP-0 cells transmitted to the network after traffic management and policing.
All Versions	Xmt CLP1 Cells (Ingress)	caviIngXmtClp1Cells	The number of CLP-1 cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt CLP1 Cells (Egress)	caviEgrXmtClp1Cells	The number of CLP-1 cells transmitted to the network after traffic management and policing.

Table E-35   Call Statistics—evaluate_isPnPortPresent

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Call Attempts	cwspInCallAttempts	This object shows the number of incoming Signaling messages (Setup and Add Party) received by the switching node on this interface for Call establishment.
All Versions	In Call Estabs	cwspInCallEstabs	This object shows the number of incoming Signaling Messages (Connect and Add Party Ack) received by the switching node on this interface which marks that a call has been successfully established.
All Versions	In Call Failures	cwspInCallFailures	This object shows the total number of incoming Point-to-Point (p2p) and Point-to-MultiPoint(p2mp) SVC/SPVC call attempts failed on this interface.
All Versions	In Filter Failures	cwspInFilterFailures	This object shows the number of incoming Point-to-Point(p2p) and Point-to-MultiPoint(p2mp) SVC/SPVC call attempts which failed due to address filtering on this interface.

Table E-35   Call Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Route Failures	cwspInRouteFailures	This object shows the number of incoming Point-to-Point(p2p) and Point-to-MulitPoint(p2mp) SVC/SPVC call attempts on this interface which failed because there was no route to the destination available.
All Versions	In Resource Failures	cwspInResrcFailures	This object shows the number of incoming Point-to-Point(p2p) and Point-to-MulitPoint(p2mp) SVC/SPVC call attempts on this interface which failed because there were not enough resources as requested in the parameters of the call.
All Versions	In Timer Failures	cwspInTimerFailures	This object shows the number of signaling timers timed out for incoming Point-to-Point(p2p) and Point-to-MultiPoint(p2mp) SVC/SPVC calls on this interface.
All Versions	In Crankbacks	cwspInCrankbacks	This object shows the number of Crankback IEs received on this interface for incoming Point-to-Point(p2p) and Point-to-MultiPoint (p2mp) SVC/SPVC call attempts.
All Versions	Out Call Attempts	cwspOutCallAttempts	This object shows the number of outgoing Signaling messages (Setup and Add Party) on this interface for Call establishment.
All Versions	Out Call Estabs	cwspOutCallEstabs	This object shows the number of outgoing Signaling messages (Connect and Add Party Ack) which mark the call being established on this interface
All Versions	Out Call Failures	cwspOutCallFailures	This object shows the total number of outgoing Signaling messages for Point-to-Point and Point-to-MultiPoint call establishment on this interface which failed.
All Versions	Out Filter Failures	cwspOutFilterFailures	This object shows the number of outgoing Signaling messages for call establishment on this interface which failed the address filtering.

Table E-35   Call Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Out Route Failures	cwspOutRouteFailures	This object shows the number of outgoing Signaling messages for call establishment on this interface which failed because the route was not available.
All Versions	Out Resource Failures	cwspOutResrcFailures	This object shows the number of outgoing Signaling messages for call establishment on this interface which failed because the resource requested was not available.
All Versions	Out Timer Failures	cwspOutTimerFailures	This object shows the number of Signaling timers timed-out on this interface for outgoing signaling messages.
All Versions	Out Crankbacks	cwspOutCrankbacks	This object shows the number of Crankback IEs being sent on this interface for outgoing signaling Release messages. This is generated on the node which generates the Crankback IEs.

Table E-36   Load Statistics—evaluate_isPnPortPresent

Applicability	Counter Name	MIB Object Name	Description
All Versions	BW Total	cwspLoadBwTotal	The total bandwidth of the interface.
All Versions	Max BW CBR	cwspLoadMaxBwCbr	The Maximum bandwith for CBR service.
All Versions	Max BW Real-Time VBR	cwspLoadMaxBwRtVbr	The maximum bandwith for real-time VBR service.
All Versions	Max BW Non Real-Time VBR	cwspLoadMaxBwNrtVbr	The maximum bandwith for non-real-time VBR service.
All Versions	Max BW ABR	cwspLoadMaxBwAbr	The maximum bandwith for ABR service.
All Versions	Max BW UBR	cwspLoadMaxBwUbr	The maximum bandwith for UBR service.
All Versions	BW Available	cwspLoadBwAvail	The total available bandwidth of the interface.
All Versions	Available BW CBR	cwspLoadAvlBwCbr	The available bandwith for CBR service.
All Versions	Avaliable BW Real-Time VBR	cwspLoadAvlBwRtVbr	The available bandwith for real-time VBR service.
All Versions	Available BW Non Real-Time VBR	cwspLoadAvlBwNrtVbr	The available bandwith for non-real-time VBR service.

Table E-36   Load Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Available BW ABR	cwspLoadAvlBwAbr	The available bandwith for ABR service.
All Versions	Available BW UBR	cwspLoadAvlBwUbr	The available bandwith for UBR service.
All Versions	Available VCs	cwspLoadVcAvail	The total number of available VCs of the interface.
All Versions	Avaailable VCs CBR	cwspLoadAvlVcCbr	The number of VCs used by CBR service.
All Versions	Available VCs Real-Time VBR	cwspLoadAvlVcRtVbr	The number of VCs used by real-time VBR service.
All Versions	cwspLoadAvlVcNrtVbr	cwspLoadAvlVcNrtVbr	The number of VCs used by non-real-time VBR service.
All Versions	cwspLoadAvlVcAbr	cwspLoadAvlVcAbr	The number of VCs used by ABR service.
All Versions	cwspLoadAvlVcUbr	cwspLoadAvlVcUbr	The number of VCs used by UBR service.
All Versions	cwspLoadCtdCbr	cwspLoadCtdCbr	The cell transfer delay of CBR service.
All Versions	cwspLoadCtdRtVbr	cwspLoadCtdRtVbr	The cell transfer delay of real-time VBR service.
All Versions	cwspLoadCtdNrtVbr	cwspLoadCtdNrtVbr	The cell transfer delay of non-real-time VBR service.
All Versions	cwspLoadCtdAbr	cwspLoadCtdAbr	The cell transfer delay of ABR service.
All Versions	cwspLoadCtdUbr	cwspLoadCtdUbr	The cell transfer delay of UBR service.
All Versions	cwspLoadCdvCbr	cwspLoadCdvCbr	The cell delay variation of CBR service.
All Versions	cwspLoadCdvRtVbr	cwspLoadCdvRtVbr	The cell delay variation of real-time VBR service.
All Versions	cwspLoadCdvNrtVbr	cwspLoadCdvNrtVbr	The cell delay variation of non-real-time VBR service.
All Versions	cwspLoadCdvAbr	cwspLoadCdvAbr	The cell delay variation of ABR service.
All Versions	cwspLoadCdvUbr	cwspLoadCdvUbr	The cell delay variation of UBR service.
All Versions	cwspLoadClr0Cbr	cwspLoadClr0Cbr	The cell loss ratio-0 of CBR service, -1 implies N/A.
All Versions	cwspLoadClr0RtVbr	cwspLoadClr0RtVbr	The cell loss ratio-0 of real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr0NrtVbr	cwspLoadClr0NrtVbr	The cell loss ratio-0 of non-real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr0Abr	cwspLoadClr0Abr	The cell loss ratio-0 of ABR service, -1 implies N/A.

Table E-36   Load Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspLoadClr0Ubr	cwspLoadClr0Ubr	The cell loss ratio-0 of UBR service, -1 implies N/A.
All Versions	cwspLoadClr01Cbr	cwspLoadClr01Cbr	The cell loss ratio-1 of CBR service, -1 implies N/A.
All Versions	cwspLoadClr01RtVbr	cwspLoadClr01RtVbr	The cell loss ratio-1 of real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr01NrtVbr	cwspLoadClr01NrtVbr	The cell loss ratio-1 of non-real-time VBR service, -1 implies N/A.
All Versions	cwspLoadClr01Abr	cwspLoadClr01Abr	The cell loss ratio-1 of ABR service, -1 implies N/A.
All Versions	cwspLoadClr01Ubr	cwspLoadClr01Ubr	The cell loss ratio-1 of UBR service, -1 implies N/A.
All Versions	cwspLoadMinGurCrCbr	cwspLoadMinGurCrCbr	The minimum guaranteed cell rate capacity of CBR service.
All Versions	cwspLoadMinGurCrRtVbr	cwspLoadMinGurCrRtVbr	The minimum guaranteed cell rate capacity of real-time VBR service.
All Versions	cwspLoadMinGurCrNrtVbr	cwspLoadMinGurCrNrtVbr	The minimum guaranteed cell rate capacity of non-real-time VBR service.
All Versions	cwspLoadMinGurCrAbr	cwspLoadMinGurCrAbr	The minimum guaranteed cell rate capacity of ABR service.
All Versions	cwspLoadMinGurCrUbr	cwspLoadMinGurCrUbr	The minimum guaranteed cell rate capacity of UBR service.

Table E-37   Signalling Statistics—evaluate_isPnPortPresent

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspCallProcRcv	cwspCallProcRcv	Number of CALL PROCEEDING messages received on this interface.
All Versions	cwspConnectRcv	cwspConnectRcv	Number of CONNECT messages received on this interface.
All Versions	cwspConnectAckRcv	cwspConnectAckRcv	Number of CONNECT ACK messages received on this interface.
All Versions	cwspSetupRcv	cwspSetupRcv	Number of SETUP messages received on this interface.
All Versions	cwspReleaseRcv	cwspReleaseRcv	Number of RELEASE messages received on this interface.
All Versions	cwspReleaseComplRcv	cwspReleaseComplRcv	Number of RELEASE COMPLETE messages received on this interface.
All Versions	cwspRestartRcv	cwspRestartRcv	Number of RESTART messages received on this interface.

Table E-37   Signalling Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspRestartAckRcv	cwspRestartAckRcv	Number of RESTART ACK messages received on this interface.
All Versions	cwspStatusRcv	cwspStatusRcv	Number of STATUS messages received on this interface.
All Versions	cwspStatusEnqRcv	cwspStatusEnqRcv	Number of STATUS ENQUIRY messages received on this interface.
All Versions	cwspNotifyRcv	cwspNotifyRcv	Number of NOTIFY messages received on this interface.
All Versions	cwspAlertRcv	cwspAlertRcv	Number of ALERT messages received on this interface.
All Versions	cwspProgressRcv	cwspProgressRcv	Number of PROGRESS messages received on this interface.
All Versions	cwspAddPtyRcv	cwspAddPtyRcv	Number of ADD PARTY messages received on this interface.
All Versions	cwspAddPtyAckRcv	cwspAddPtyAckRcv	Number of ADD PARTY ACK messages received on this interface.
All Versions	cwspAddPtyRejRcv	cwspAddPtyRejRcv	Number of ADD PARTY REJECT messages received on this interface.
All Versions	cwspDropPtyRcv	cwspDropPtyRcv	Number of DROP PARTY messages received on this interface.
All Versions	cwspIncorrectMsgRcv	cwspIncorrectMsgRcv	Number of Incorrect messages received on this interface.
All Versions	cwspTimerExpiries	cwspTimerExpiries	Number of timeouts occurred on this interface.
All Versions	cwspLastCause	cwspLastCause	to indicate the last cause of release or cranckback.
All Versions	cwspLastDiagnostic	cwspLastDiagnostic	to indicate the last diagnostic of release or cranckback.
All Versions	cwspCallProcXmt	cwspCallProcXmt	Number of CALL PROCEEDING messages transmitted from this interface.
All Versions	cwspConnectXmt	cwspConnectXmt	Number of CONNECT messages transmitted from this interface.
All Versions	cwspConnectAckXmt	cwspConnectAckXmt	Number of CONNECT ACK messages transmitted from this interface.
All Versions	cwspSetupXmt	cwspSetupXmt	Number of SETUP messages transmitted from this interface.
All Versions	cwspReleaseXmt	cwspReleaseXmt	Number of RELEASE messages transmitted from this interface.
All Versions	cwspReleaseComplXmt	cwspReleaseComplXmt	Number of RELEASE COMPLETE messages transmitted from this interface.

Table E-37   Signalling Statistics—evaluate_isPnPortPresent (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	cwspRestartXmt	cwspRestartXmt	Number of RESTART messages transmitted from this interface.
All Versions	cwspRestartAckXmt	cwspRestartAckXmt	Number of RESTART ACK messages transmitted from this interface.
All Versions	cwspStatusXmt	cwspStatusXmt	Number of STATUS messages transmitted from this interface.
All Versions	cwspStatusEnqXmt	cwspStatusEnqXmt	Number of STATUS ENQUIRY messages transmitted from this interface.
All Versions	cwspNotifyXmt	cwspNotifyXmt	Number of NOTIFY messages transmitted from this interface.
All Versions	cwspAlertXmt	cwspAlertXmt	Number of ALERT messages transmitted from this interface.
All Versions	cwspProgressXmt	cwspProgressXmt	Number of PROGRESS messages transmitted from this interface.
All Versions	cwspAddPtyXmt	cwspAddPtyXmt	Number of ADD PARTY messages transmitted from this interface.
All Versions	cwspAddPtyAckXmt	cwspAddPtyAckXmt	Number of ADD PARTY ACK messages transmitted from this interface.
All Versions	cwspAddPtyRejXmt	cwspAddPtyRejXmt	Number of ADD PARTY REJECT messages transmitted from this interface.
All Versions	cwspDropPtyXmt	cwspDropPtyXmt	Number of DROP PARTY messages transmitted from this interface.
All Versions	cwspSscopStatus	cwspSscopStatus	Sscop link status on an NNI interface, object is meaningful along with ciscoWANSscopLinkChange trap.

E.14 AXSME-SONET-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Section Current Counters
- Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM
- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

- Section Current 24 Hour Counters— cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Table E-38   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-39   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	SESs	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	CVs	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	UASs	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-40   Section Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SESs	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-40   Section Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	SEFSs	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	CVs	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-41   Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-42   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsLineCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsLineCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsLineCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsLineCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
All Versions	ESs (Far End)	cwsFELineCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
All Versions	SESs (Far End)	cwsFELineCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
All Versions	CVs (Far End)	cwsFELineCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
All Versions	UASs (Far End)	cwsFELineCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-43   Section Current 24 Hour Counters— cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsSectionCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsSectionCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	SEFs	cwsSectionCurrent24HrSEFSs	Number of SEFSs encountered in current 24 hour interval.
All Versions	CVs	cwsSectionCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.

Table E-44   Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.

Table E-44   Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-45   Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Section LOSs	cssLOSs	The number of Loss of signals(LOS) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Section LOFs	cssLOFs	The number of Loss of Frames (LOF) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Line AISs	cslAISs	The number of alarm indication signals(AIS) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
All Versions	Line RFIs	cslRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path AISs	cspAISs	The number of alarm indication signals (AIS) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path RFIs	cspRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.

E.15 MGX2-RPM-Card—Supported Real-Time Counters

No Real-Time Counters supported for MGX2-RPM-Card

E.16 RPM-EndPoint-Connection—Supported Real-Time Counters

No Real-Time Counters supported for the RPM-EndPoint-Connection

E.17 RPM-ETHERNET-Line—Supported Real-Time Counters

This section includes the following information:

- Category—Interface Counters
- Category—Ethernet Counters

Table E-46   Category—Interface Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Interface Speed	ifSpeed	Interface's Current Bandwidth in Bits/Sec
All Versions	Received Octets	ifInOctets	The total number of octets received on the interface, including framing characters.
All Versions	In Ucast Packets	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. 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.
All Versions	In Discarded Packets	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. 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.
All Versions	In Error Packets	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. 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.

Table E-46   Category—Interface Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Discarded Packets (Unknown Protocol)	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. 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.
All Versions	Tramsnitted Octets	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. 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.
All Versions	Out Ucast Packets	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. 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.
All Versions	Out Packets Discarded	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. 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.
All Versions	Out Error Packets	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. 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.
All Versions	Input BPS (5 min)	locIfInBitsSec	Five minute exponentially-decayed moving average of input bits per second.
All Versions	Output BPS (5 min)	locIfOutBitsSec	Five minute exponentially-decayed moving average of output bits per second.

Table E-46   Category—Interface Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Ignored In Packets	locIfInIgnored	Number of input packets which were simply ignored by this interface.
All Versions	Internal Resets	locIfResets	Number of times the interface internally reset.
All Versions	Output Collisions	locIfCollisions	The number of output collisions detected on this interface.
All Versions	Input Queue Drops	locIfInputQueueDrops	The number of packets dropped because the input queue was full.
All Versions	Output Queue Drops	locIfOutputQueueDrops	The number of packets dropped because the output queue was full.

Table E-47   Category—Ethernet Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Small Packets	locIfInRunts	Number of packets input which were smaller than the allowable physical media permitted.
All Versions	Large Packets	locIfInGiants	Number of input packets which were larger than the physical media permitted.
All Versions	Misaligned Packets	locIfInFrame	Number of input packet which were misaligned.
All Versions	dot3StatsIndex	dot3StatsIndex	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.
All Versions	Alignments	dot3StatsAlignmentErrors	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 LLC (or other MAC user). Received frames for which multiple error conditions obtain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC.
All Versions	SQE Test Errors	dot3StatsSQETestErrors	A count of times that the SQE TEST ERROR message is generated by the PLS sublayer for a particular interface. The SQE TEST ERROR message is defined in section 7.2.2.2.4 of ANSI/IEEE 802.3-1985 and its generation is described in section 7.2.4.6 of the same document.

Table E-47   Category—Ethernet Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Late Collisions	dot3StatsLateCollisions	The number of times that a collision is detected on a particular interface later than 512 bit-times into the transmission of a packet. Five hundred and twelve bit-times corresponds to 51.2 microseconds on a 10 Mbit/s system. 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.
All Versions	MAC Tramsnit Errors	dot3StatsInternalMacTransmitErrors	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.
All Versions	Carrier Sense Errors	dot3StatsCarrierSenseErrors	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.
All Versions	Giant Frames	dot3StatsFrameTooLongs	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 LLC (or other MAC user). Received frames for which multiple error conditions obtain are, according to the conventions of IEEE 802.3 Layer Management, counted exclusively according to the error status presented to the LLC.
All Versions	MAC Receive Errors	dot3StatsInternalMacReceiveErrors	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.

E.18 RPM-Port—Supported Real-Time Counters

No Real-Time Counters supported for the RPM-Port

E.19 RPM-SONET-Line—Supported Real-Time Counters

This section includes the following information:

- Category—Interface Counters
- Category—Line Current Counters
- Category—Section Current Counters
- Category—Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Table E-48   Category—Interface Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Interface Speed	ifSpeed	Interface's Current Bandwidth in Bits/Sec
All Versions	Received Octets	ifInOctets	The total number of octets received on the interface, including framing characters.
All Versions	In Ucast Packets	ifInUcastPkts	The number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer. 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.
All Versions	In Discarded Packets	ifInDiscards	The number of inbound packets which were chosen to be discarded even though no errors had been detected to prevent their being deliverable to a higher-layer protocol. One possible reason for discarding such a packet could be to free up buffer space. 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.
All Versions	In Error Packets	ifInErrors	For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character- oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol. 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.

Table E-48   Category—Interface Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Discarded Packets (Unknown Protocol)	ifInUnknownProtos	For packet-oriented interfaces, the number of packets received via the interface which were discarded because of an unknown or unsupported protocol. For character-oriented or fixed-length interfaces that support protocol multiplexing the number of transmission units received via the interface which were discarded because of an unknown or unsupported protocol. For any interface that does not support protocol multiplexing, this counter will always be 0. 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.
All Versions	Tramsnitted Octets	ifOutOctets	The total number of octets transmitted out of the interface, including framing characters. 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.
All Versions	Out Ucast Packets	ifOutUcastPkts	The total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. 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.
All Versions	Out Packets Discarded	ifOutDiscards	The number of outbound packets which were chosen to be discarded even though no errors had been detected to prevent their being transmitted. One possible reason for discarding such a packet could be to free up buffer space. 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.
All Versions	Out Error Packets	ifOutErrors	For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors. 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.
All Versions	Input BPS (5 min)	locIfInBitsSec	Five minute exponentially-decayed moving average of input bits per second.
All Versions	Output BPS (5 min)	locIfOutBitsSec	Five minute exponentially-decayed moving average of output bits per second.

Table E-48   Category—Interface Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Ignored In Packets	locIfInIgnored	Number of input packets which were simply ignored by this interface.
All Versions	Internal Resets	locIfResets	Number of times the interface internally reset.
All Versions	Output Collisions	locIfCollisions	The number of output collisions detected on this interface.
All Versions	Input Queue Drops	locIfInputQueueDrops	The number of packets dropped because the input queue was full.
All Versions	Output Queue Drops	locIfOutputQueueDrops	The number of packets dropped because the output queue was full.

Table E-49   Category—Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	SESs	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	CVs	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	UASs	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-49   Category—Line Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-50   Category—Section Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SESs	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SEFSs	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	CVs	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-51   Category—Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.

Table E-51   Category—Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

E.20 RPM-VirtualPort—Supported Real-Time Counters

No Real-Time Counters supported for the RPM-VirtualPort

E.21 MGX2-SRM-Card—Supported Real-Time Counters

No Real-Time Counters supported for the MGX2-SRM-Card

E.22 MGX2-SRM-DS3-Line—Supported Real-Time Counters

This section includes the following information:

- Category—ATM Cell Layer Counters—cellLayer EQ true
- Category—Line Current Counters
- Category—Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12
- Category—Line Alarm Statistics
- PLCP Counters—cardFcType not equal to 160

Table E-52   Category—ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.

Table E-52   Category—ATM Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-53   Category—Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	PESs	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
cardFamily not equal to AXSMXG	PSESs	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
cardFamily not equal to AXSMXG	SEFSs	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
All Versions	UASs	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
cardFamily not equal to AXSMXG	LCVs	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
cardFamily not equal to AXSMXG	PCVs	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.
cardFamily not equal to AXSMXG	LESs	dsx3CurrentLESs	The number of Line Errored Seconds.
All Versions	CCVs	dsx3CurrentCCVs	The number of C-bit Coding Violations.
All Versions	CESs	dsx3CurrentCESs	The number of C-bit Errored Seconds.
All Versions	CSESs	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CESs (Far End)	dsx3FarEndCurrentCESs	The counter associated with the number of Far Far End C-bit Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CSESs (Far End)	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.

Table E-53   Category—Line Current Counters (continued)

cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CCVs (Far End)	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	UASs (Far End)	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.

Table E-54   Category—Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12

Applicability	Counter Name	MIB Object Name	Description
All Versions	LCVs	cds3LCVCurrent24Hr	The number of LCVs encountered by the line since the start of current 24 hour period.
All Versions	LESs	cds3LESCurrent24Hr	The number LESS encountered by the line since the start of current 24 hour period.
All Versions	PCVs	cds3PCVCurrent24Hr	The number PCVs encountered by the line since the start of current 24 hour period.
All Versions	PESs	cds3PESCurrent24Hr	The number of PESs encountered by the line since the start of current 24 hour period.
All Versions	PSESs	cds3PSESCurrent24Hr	The number of PSESs encountered by the line since the start of current 24 hour period.
All Versions	SEFSs	cds3SEFSCurrent24Hr	The number of SEFSs encountered by the line since the start of the current 24 hour period.
All Versions	UASs	cds3UASCurrent24Hr	The number of UASs encountered by the line since the start of current 24 hour period.
All Versions	CCVs	cds3CCVCurrent24Hr	The number CCVs encounterd by the line since the start of current 24 hour period.
All Versions	CESs	cds3CESCurrent24Hr	The number of CESs encountered by the line since the start of current 24 hour period.
All Versions	CSESs	cds3CSESCurrent24Hr	The number of CSESs encountered by the line since th start of current 24 hour period.
All Versions	LSESs	cds3LSESCurrent24Hr	The number of LSESs (Line severedly errored seconds) encountered by the line since the start of current 24 hour period.

Table E-55   Category—Line Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	LOS Count	cds3RcvLOSCount	The number of times Loss of Signal was detected with or without integrating to LOS alarm.
cardFamily not equal to AXSMXG	OOF Count	cds3RcvOOFCount	The number of times Out of Frame was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds3RAICount	The number of timesRemote Alarm Indication was detected with or without integrating to RAI alarm.
All Versions	CCV Count	cds3CCVCount	The counter associated with the number of C-Bit Coding Violations encountered by a T3/E3 interface.
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FE Count	cds3FECount	The number of Framing Errors encountered by a T3/E3 interface.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	EXZS Count	cds3EXZSCount	The number of Excessive Zeros(EXZ) by a T3/E3 interface. An EXZ is the occurrence of any string of zeros having length equal to or greater than 3 for B3ZS, or any string of zeros having length greater than 4 for HDB3.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	LCV Count	cds3LCVCount	The count of both BPVs(Bipolar Violations) and EXZs(Excessive Zeros) encountered by a T3/E3 interface.An EXZ increments the LCV by one regardless of the length of the zero string.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	PCV Count	cds3PCVCount	This is the count of P-bit Coding Violation(PCV) error event encountered by DS3 interface. For all DS3 applications, a coding violation error event is a P-bit Parity Error(PERR) event. The parity errors occur when the calculated parity in the information bits of the DS3 frame does not match up with an expected parity value.

Table E-55   Category—Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	CPE Count	cds3CPECount	The number of C-bit parity errors(CPERR) on a DS3 interface. This value is calculated over noninformation bits in the DS3 frame.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FEBE Count	cds3FEBECount	The number of Far End Block Errors(FEBE) encountered by a T3/E3 interface.These include frame alignment errors, multiframe alignment errors, and C-bit parity errors. These errors are generated by the transmitter at the far end, and indicate that the transmitter,cabling or the upstream node is faulty.
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to SRM AND cardFamily not equal to MPSM	AIS Count	cds3RcvAISCount	The number of times Alarm Indication Signals(AIS) were detected. The AIS indicates that an upstream failure has been detected by the far end.

Table E-56   PLCP Counters—cardFcType not equal to 160

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentBIP-8CV	cds3PlcpBip8CVCurrent	The number of BIP-8 code violations (CV) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8CV	cds3PlcpBip8CV24HrBucket	The number of BIP-8 CVs encountered by the line in the last 24 hours.
All Versions	CurrentBIP-8ES	cds3PlcpBip8ESCurrent	The number of BIP-8 Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8ES	cds3PlcpBip8ES24HrBucket	The number of BIP-8 ES encountered by the line in the last 24 hour.
All Versions	CurrentBIP-8SES	cds3PlcpBip8SESCurrent	The number of BIP-8 Severely Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8SES	cds3PlcpBip8SES24HrBucket	The number of BIP-8 SES encountered by the line in the last 24 hour.

Table E-56   PLCP Counters—cardFcType not equal to 160 (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentSEFs	cds3PlcpSEFSCurrent	The number of BIP-8 Severely Errored Framing Seconds(SEFS) encountered by the line in the current 15-minute period.
All Versions	Current24HrSEFs	cds3PlcpSEFS24HrBucket	The number of BIP-8 SEFS encountered by the line in the last 24 hour.
All Versions	CurrentUAS	cds3PlcpUASCurrent	The number of Unavailable Seconds(UAS) encountered by the line in the current 15-minute period.
All Versions	Current24HrUAS	cds3PlcpUAS24HrBucket	The number of BIP-8 UAS encountered by the line in the last 24 hour.
cardFamily EQ AXSME	BIP-8 Errors	cds3PlcpRcvBip8Count	The number of of BIP-8 errors encountered by the line.
All Versions	Num Of OOF	cds3PlcpRcvOOFCount	The number of times Out of Frame(OOF) was detected with or without integrating to OOF alarm.
cardFamily EQ AXSM AND cardFamily EQ AXSME	Num of RAI	cds3PlcpRcvRAICount	The number of times Remote Alarm Indication(RAI) was detected with or without integrating to RAI alarm.
cardFamily EQ AXSME	Num of FE Count	cds3PlcpFECount	The number of Framing Errors detected.
cardFamily EQ AXSME	Num of FESec	cds3PlcpFESecCount	The number of Framing Error errored seconds.
cardFamily EQ AXSME	Num of SEFESec	cds3PlcpSEFSecCount	The number of Severely errored Framing error seconds.
cardFamily EQ AXSME	Num of FEBE	cds3PlcpFEBECount	The count of Far End Block Errors (FEBE) detected.
cardFamily EQ AXSME	Num of FEBESec	cds3PlcpFEBESecCount	The number of FEBE errored seconds.
cardFamily EQ AXSME	Num of SEFEBESec	cds3PlcpSEFEBESecCount	The number of Severely errored FEBE seconds.

E.23 MGX2-SRM-SONET-Line—Supported Real-Time Counters

This section includes the following information:

- ATM Cell Layer Counters—cellLayer EQ true

- Line Current Counters

- Section Current Counters

- Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

- Section Current 24 Hour Counters— cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM
- Alarm Statistics

Table E-57   ATM Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-58   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	SESs	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	CVs	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	UASs	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-59   Section Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SESs	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-59   Section Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	SEFSs	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	CVs	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-60   Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-61   *Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM*

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsLineCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsLineCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsLineCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsLineCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
All Versions	ESs (Far End)	cwsFELineCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
All Versions	SESs (Far End)	cwsFELineCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
All Versions	CVs (Far End)	cwsFELineCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
All Versions	UASs (Far End)	cwsFELineCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-62   *Section Current 24 Hour Counters— cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM*

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsSectionCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsSectionCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	SEFs	cwsSectionCurrent24HrSEFSs	Number of SEFSs encountered in current 24 hour interval.
All Versions	CVs	cwsSectionCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.

Table E-63   *Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM*

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.

Table E-63   Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-64   Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Section LOSs	cssLOSs	The number of Loss of signals(LOS) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Section LOFs	cssLOFs	The number of Loss of Frames (LOF) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Line AISs	cslAISs	The number of alarm indication signals(AIS) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
All Versions	Line RFIs	cslRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path AISs	cspAISs	The number of alarm indication signals (AIS) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path RFIs	cspRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.

E.24 Common/Card-BearerEndPoint—Supported Real-Time Counters

This section includes the following information:

- Bearer Counters—platform EQ NOTARES

Table E-65   Bearer Counters—platform EQ NOTARES

Applicability	Counter Name	MIB Object Name	Description
All Versions	Channel Id	bearerCid	This attribute defines the CID (Channel ID associated with this bearer connection.This refers to the same value as vismAal2CidNum in the vismAal2CidCnfTable.
All Versions	LCN	bearerLcn	This attribute defines the PVC or LCN number to which this bearer connection is associated with. This refers to the same value as in vismChanNum in vismChanCnfGrp table.
All Versions	Sent Packets	bearerSentPkts	This attribute defines the count of packets sent towards the network since setup.
All Versions	Received Packets	bearerRcvdPkts	This attribute defines the count of packets received from the network since setup.
All Versions	Sent Octets	bearerSentOctets	This attribute defines the count of bytes sent towards the network since this connection setup.
All Versions	Received Octets	bearerRcvdOctets	This attribute defines the count of bytes received from the network since this connection setup.
All Versions	Lost Packets	bearerLostPkts	This attribute defines the count of packets lost in the egress direction (from the network). This is a computed number based on the expected number of packets and the actual number of packets arrived from the network. Currently this object is not used.
All Versions	Jitter	bearerJitter	This attribute defines the jitter (a.k.a interarrival jitter) This value is determined by the DSP and obtained by the HOST processor upon querying the DSP on a periodic basis. This value is expressed in units of milliseconds. Currently this object is not used.
All Versions	Latency	bearerLatency	This attribute defines the latency (a.k.a end-to-end average transmission delay for a voice packet. This value is expressed in units of milliseconds. Currently this object is not used.

Table E-65   Bearer Counters—platform EQ NOTARES (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	AAL2 External AIS Count	bearerAal2ExtAISCnts	This object contains the number of external AIS aal2 Type3 packets received. External AIS - is a Alarm Indication Signal associated with a maintenance alarm detected on a defective maintenance span, that is transmitted in the direction of the defect as a substitute for normal signal. The purpose is to show the downstream entities that a defect has been identified and to prevent other maintenance alrams consequent to this first defect. External AIS bit stream is represented by an all 1's signal. Ref - ITU-T Rec. M.20 sec. 5.4.2 a
All Versions	AAL2 External RAI Count	bearerAal2ExtRAICnts	This object contains the number of external RAI aal2 Type3 packets received. External RAI - is a Remote Alarm Indication signal that is transmitted upstream from an entity that has detected defects persisting long enough to constitute a received signal failure. Its purpose is to report in the backward direction that there is an interruption of service in the forward direction. Ref - ITU-T Rec. G.704 section 2.1.3.1.3
All Versions	AAL2 Conn AIS Count	bearerAal2ConnAISCnts	This object contains the number of external Conn AIS aal2 Type2 packets received. External Conn AIS - is a Alarm Indicating Signal transmitted in the downstream direction from the AAL type 2 connecting point that first detects a defect affecting the AAL type 2 connection; this includes defects indicated by lower layers. Ref - ITU-T Rec. I.610 sec 6.2.2.1.1.1
All Versions	AAL2 Conn RDI Count	bearerAal2ConnRDICnts	This object contains the number of external Conn RDI (Remote Defect Ind.) aal2 Type2 packets received. External Conn RDI - is a signal transmitted upstream by an AAl type 2 endpoint that is in an alarm state as the result of having received an AAL type2 connection AIS or having detected a defect that affects the AAL type2 connection.

E.25 Common/Card-RudpSession—Supported Real-Time Counters

This section includes the following information:

- RUDP Session Counters

Table E-66   RUDP Session Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	vismRudpSessionAutoResets	vismRudpSessionAutoResets	Auto reset is also known as soft reset. VISM (gateway) initiates an auto reset when it detects that a connection has failed. This keeps track of the number of auto resets initiated by VISM.
All Versions	vismRudpSessionRcvdAutoResets	vismRudpSessionRcvdAutoResets	This is the counter for the number of auto resets initiated by MGC and received by VISM.
All Versions	vismRudpSessionRcvdInSeqs	vismRudpSessionRcvdInSeqs	This object indicates number of packets received in sequence.
All Versions	vismRudpSessionRcvdOutSeqs	vismRudpSessionRcvdOutSeqs	Number of packets received out of sequence.
All Versions	vismRudpSessionSentPackets	vismRudpSessionSentPackets	This is the number of packets sent by VISM. Including SYN message.
All Versions	vismRudpSessionRcvdPackets	vismRudpSessionRcvdPackets	This is the number of packets received by VISM. Including active message.
All Versions	vismRudpSessionSentBytes	vismRudpSessionSentBytes	This object indicates the number of bytes sent to MGC.
All Versions	vismRudpSessionRcvdBytes	vismRudpSessionRcvdBytes	This object keeps track of the number of bytes received from MGC.
All Versions	vismRudpSessionDataSentPkts	vismRudpSessionDataSentPkts	This object is the number of data packets sent to MGC.
All Versions	vismRudpSessionDataRcvdPkts	vismRudpSessionDataRcvdPkts	This object is the number of data packets received from MGC.
All Versions	vismRudpSessionDiscardPkts	vismRudpSessionDiscardPkts	This is the number of packets discarded.
All Versions	vismRudpSessionRetransPkts	vismRudpSessionRetransPkts	This is the number of packets retransmitted.

E.26 Common/Card-SrcpPeer—Supported Real-Time Counters

This section includes the following information:

- **SRCP Peer Counters**

Table E-67   SRCP Peer Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	SRCP Peer Name	srcpStatsPeerName	Denotes the name of the SRCP peer. If MGMIB is supported, this is the same as the mgcName from the mgcTable. It is provided here as a read-only parameter as a convinience feature.
All Versions	Discarded Count	packetsDiscardedCnts	The number of objects that were received and discarded. The packets may get discarded because of indecipherable PDUs like bad protocol version, bad command verb etc, or because of unknown transaction IDs (in case of SRCP clients).
All Versions	AUGW Count	augwCnts	The total number of AUGW commands received from the peer on this IP address.
All Versions	AULN Count	aulnCnts	The total number of AULN commands received from or sent to the peer on this IP address.
All Versions	RQNT Count	rqntCnts	The total number of RQNT commands received from or sent to the peer on this IP address.
All Versions	NTFY Count	ntfyCnts	The total number of NTFY commands received from or sent to the peer on this IP address.
All Versions	AUGW Fail Count	augwFailCnts	Media Gateway—The total number of AUGW commands received that were responded to with a failure return code. Media Gateway Controller—The total number of AUGW commands sent which were timed out without a response or for which a response with failure return code was received.
All Versions	AULN Fail Count	aulnFailCnts	Media Gateway—The total number of AULN commands received that were responded to with a failure return code. Media Gateway Controller—The total number of AULN commands sent which were timed out without a response or for which a response with failure return code was received.

Table E-67   SRCP Peer Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	RQNT Fail Count	rqntFailCnts	Media Gateway—The total number of RQNT commands received that were responded to with a failure return code. Media Gateway Controller—The total number of RQNT commands sent which were timed out without a response or for which a response with failure return code was received.
All Versions	NTFY Fail Count	ntfyFailCnts	Media Gateway—The total number of NTFY commands sent which were timed out without a response or for which a response with failure return code was received. Media Gateway Controller—The total number of NTFY commands received that were responded to with a failure return code.

E.27 Common/Card-XgcpPeer—Supported Real-Time Counters

This section includes the following information:

- XGCP Message Counters

Table E-68   XGCP Message Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	xgcpSuccessMessages	xgcpSuccessMessages	This object specifies the count of successful messages that communicate with the Media Gateway Controller on that IP address. Successful messages apply to both transmit and receive messages. Transmit: Positive ACK is received from the Media Gateway Controller Receive: Positive ACK is sent to the Media Gateway Controller. This implies that the format of the message is correct and the request can be fulfilled.
All Versions	xgcpFailMessages	xgcpFailMessages	This object specifies the count of failed messages that communicate with the Media Gateway Controller on that IP address. Failed messages apply to both transmit and receive messages. Transmit: Either NAK is received from the MGC or message times out waiting for ACK. Receive: Format of the received message is bad or the request can not be fulfilled.
All Versions	CRCX Count	vismXgcpCrcxCnts	This refers to the count of CRCX (Create Connection) messages received from the call agent since reset.
All Versions	CRCX Fail Count	vismXgcpCrcxFailCnts	This refers to the count of CRCX (Create Connection) messages received from the call agent that were responded to with a failure return code.

Table E-68   XGCP Message Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	MDCX Count	vismXgcpMdcxCnts	This refers to the count of MDCX (Modify Connection) messages received from the call agent since reset.
All Versions	MDCX Fail Count	vismXgcpMdcxFailCnts	This refers to the count of MDCX (Modify Connection) messages received from the call agent that were responded to with a failure return code.
All Versions	DLCX Received Count	vismXgcpDlcxRcvCnts	This refers to the count of DLCX (Delete Connection) messages received from the call agent since reset.
All Versions	DLCX Received Fail Count	vismXgcpDlcxRcvFailCnts	This refers to the count of DLCX (Delete Connection) messages received from the call agent that were responded to with a failure return code.
All Versions	DLCX Sent Count	vismXgcpDlcxSentCnts	This refers to the count of DLCX (Delete Connection) messages sent to the call agent since reset.
All Versions	DLCX Sent Fail Count	vismXgcpDlcxSentFailCnts	This refers to the count of DLCX (Delete Connection) messages sent to the call agent for which a response with failure return code was received or which timed out waiting for an acknowledgement.
All Versions	RQNT Count	vismXgcpRqntCnts	This refers to the count of RQNT (Request Notify) messages received from the call agent since reset.
All Versions	RQNT Fail Count	vismXgcpRqntFailCnts	This refers to the count of RQNT (Request Notify) messages received from the call agent that were responded to with a failure return code.
All Versions	Notify Count	vismXgcpNtfyCnts	This refers to the count of NTFY (Notify) messages sent to the call agent since reset.
All Versions	Notify Fail Count	vismXgcpNtfyFailCnts	This refers to the count of NTFY (Notify) messages sent to the call agent for which a response with failure return code was received or which timed out waiting for a response.
All Versions	Audit Endpoint Count	vismXgcpAuepCnts	This refers to the count of AUEP (Audit Endpoint) messages received from the call agent since reset.
All Versions	Audit Endpoint Fail Count	vismXgcpAuepFailCnts	This refers to the count of AUEP (Audit Endpoint) messages received from the call agent that were responded to with a failure return code.
All Versions	Audit Connection Count	vismXgcpAucxCnts	This refers to the count of AUCX (Audit Connection) messages received from the call agent since reset.
All Versions	Audit Connection Endpoint Count	vismXgcpAucxFailCnts	This refers to the count of AUCX (Audit Connection) messages received from the call agent that were responded to with a failure return code.

Table E-68   XGCP Message Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	RSIP Count	vismXgcpRsipCnts	This refers to the count of RSIP (Restart In Progress) messages sent to the call agent since reset.
All Versions	RSIP Fail Count	vismXgcpRsipFailCnts	This refers to the count of RSIP (Restart In Progress) messages sent to the call agent for which a response with failure return code was received or which timed out waiting for a response.

E.28 VISM-Card—Supported Real-Time Counters

This section includes the following information:

- Call Statistics
- Performance Statistics
- DS0 Information

Table E-69   Call Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Total Calls	vismTotalCalls	Total Calls
All Versions	Successful Calls	vismSuccessfulCalls	Successful Calls
All Versions	Failed Calls	vismFailedCalls	Failed Calls

Table E-70   Performance Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	CPU Utilization	vismCPUUtilization	CPU Utilization
All Versions	Memory Utilization	vismMemoryUtilization	Memory Utilization

Table E-71   DS0 Information

Applicability	Counter Name	MIB Object Name	Description
All Versions	Total DS0s Count	vismTotalDs0Count	Total DS0 Count
All Versions	Free DS0s Count	vismFreeDs0Count	Free DS0 Count
All Versions	Active DS0s Count	vismActiveDs0Count	Active DS0 Count
All Versions	Blocked DS0s Count	vismBlockDs0Count	Total DS0 Count
All Versions	Active High Water Mark DS0s Count	vismActiveHighjWaterMark	Total DS0 Count

E.29 VISM-DS1-Line—Supported Real-Time Counters

This section includes the following information:

- **Line Counters**
- **DS0 Information—cardVersion Greater or Equal to 3.2**

Table E-72   Line Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv LOS Count	rcvLOSCount	The number of times the Loss of Signal was detected with or without integrating to LOS alarm.
All Versions	Rcv OOF Count	rcvOOFCount	The number of times the Out of Frame was detected with or without integrating to OOF alarm.
All Versions	Rcv RAI Count	rcvRAICount	The number of times Yellow Alarms was detected with or without integrating to RAI alarm.
All Versions	Rcv FE Count	rcvFECount	The number of Framing Pattern Errors encountered by a DS1 interface.
All Versions	lCV Current	lCVCurrent	This counter counts the number of Line code violations encountered by the interface.
All Versions	lCV 15Min Bucket	lCV15MinBucket	The counter associated with the number of Line code violations in the last 15 minute period encountered by the interface.
All Versions	lCV 24Hr Bucket	lCV24HrBucket	The counter associated with the number of Line code violations in the last 24 hour period encountered by the interface.
All Versions	lES Current	lESCurrent	This counter counts the number of Line code violations Errored Seconds encountered by the interface.
All Versions	lES 15Min Bucket	lES15MinBucket	This counter counts the number of Line code violations Errored Seconds in the last 15 minutes encountered by the interface.
All Versions	lES 24Hr Bucket	lES24HrBucket	This counter counts the number of Line code violations Errored Seconds in the last 24 hours encountered by the interface.
All Versions	lSES Current	lSESCurrent	This counter counts the number of Line code violations Severely Errored Seconds encountered by the interface.
All Versions	lSES15MinBucket	lSES15MinBucket	This counter counts the number of LCV Severely Errored Seconds in the last 15 minutes encountered by the interface.
All Versions	lSES 24Hr Bucket	lSES24HrBucket	This counter counts the number of LCV Severely Errored Seconds in the last 24 hours encountered by the interface.
All Versions	CRC Current	cRCCurrent	This counter counts the number of P Bit code violations encountered by the interface.
All Versions	CRC 15Min Bucket	cRC15MinBucket	This counter counts the number of P Bit code violations in the last 15 minutes encountered by the interface.

Table E-72   Line Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CRC 24Hr Bucket	cRC24HrBucket	This counter counts the number of P Bit code violations in the last 24 hours encountered by the interface.
All Versions	CRC ES Current	cRCESCurrent	This counter counts the number of PCV Errored Seconds encountered by the interface.
All Versions	CRC ES 15Min Bucket	cRCES15MinBucket	This counter counts the number of PCV Errored Seconds in the last 15 minutes encountered by the interface.
All Versions	CRC ES 24HrBucket	cRCES24HrBucket	This counter counts the number of PCV Errored Seconds in the last 24 hours encountered by the interface.
All Versions	CRC SES Current	cRCSESCurrent	This counter counts the number of P Bit code violations Severely Errored Seconds encountered by the interface.
All Versions	CRC SES 15Min Bucket	cRCSES15MinBucket	This counter counts the number of PCV Severely Errored Seconds in the last 15 minutes encountered by the interface.
All Versions	CRC SES 24Hr Bucket	cRCSES24HrBucket	This counter counts the number of PCV Severely Errored Seconds in the last 24 hours encountered by the interface.
All Versions	SEFS Current	sEFSCurrent	This counter counts the number of Severely Errored Framing Seconds encountered by the interface.
All Versions	SEFS 15Min Bucket	sEFS15MinBucket	This counter counts the number of Severely Errored Framing Seconds in the last 15 minutes encountered by the interface.
All Versions	SEFS 24Hr Bucket	sEFS24HrBucket	This counter counts the number of Severely Errored Framing Seconds in the last 24 hours encountered by the interface.
All Versions	AISS Current	aISSCurrent	This counter counts the number of AIS Severely Errored Seconds encountered by the interface.
All Versions	AISS 15Min Bucket	aISS15MinBucket	This counter counts the number of AIS Severely Errored Seconds in the last 15 minutes encountered by the interface.
All Versions	AISS 24Hr Bucket	aISS24HrBucket	This counter counts the number of AIS Severely Errored Seconds in the last 24 hours encountered by the interface.
All Versions	UAS Current	uASCurrent	This counter counts the number of Unavailable Seconds encountered by the interface.
All Versions	UAS 15Min Bucket	uAS15MinBucket	This counter counts the number of Unavailable Seconds in the last 15 minutes encountered by the interface.
All Versions	UAS 24Hr Bucket	uAS24HrBucket	This counter counts the number of Unavailable Seconds in the last 24 hours encountered by the interface.
All Versions	Percent EFS	percentEFS	This counter counts the %LCV Error Free Seconds.

Table E-73   DS0 Information—cardVersion Greater or Equal to 3.2

Applicability	Counter Name	MIB Object Name	Description
All Versions	Configured DS0s Count	lineTotalDs0Count	This is the total number of ds0s configured on this DS1 line.
All Versions	Free DS0s Count	lineFreeDs0Count	This is the total number of free ds0s on this DS1 line.
All Versions	Active DS0s Count	lineActiveDs0Count	This is the number of active ds0s on this line.
All Versions	Blocked DS0s Count	lineBlockDs0Count	This is the number of blocked ds0s on this line.
All Versions	Active High Water Mark DS0s Count	lineActiveHighWaterMark	This is the high water mark number of ds0s that were active simultaneously on the line.

E.30 VISM-EndPoint-Connection—Supported Real-Time Counters

This section includes the following information:

- **Channel Counters**

Table E-74   Channel Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	AAL2 HEC Errors	vismChanAal2HecErrors	The count of egress AAL2 CPS(Common Part Sub-layer) PDUs dropped due to HEC (Header Error Control) error.
All Versions	AAL2 CRC Errors	vismChanAal2CrcErrors	The count of egress AAL2 type3 CPS PDUs dropped due to invalid CRC-10 error. CRC validation is for type 3 packets only. Type 1 packets are not subjected to CRC-10 error validation. Also this counter keeps track of CRC-10 errors for the type 3 packets which are generated by the the datamover CPU only. It does not take into account of type3 packets generated by the DSPs.
All Versions	OAM Lpb Lost Cells	vismChanAal2OamLpbLostCells	The count of OAM loopback cells lost. OAM loopback cells are sent on a periodic basis (1sec) on each PVC to monitor the health of the PVC. This is applicable for all PVCs.
All Versions	AAL2 Invalid OSF Cells	vismChanAal2InvOsfCells	The Number of AAL2 cells dropped due to invalid OSF (OffSet Field) in the egress direction.
All Versions	AAL2 Invalid Party Cells	vismChanAal2InvParCells	The Number of AAL2 cells dropped due to invalid Parity bit field in the egress direction.
All Versions	AAL2 CPS Packet Xmt	vismChanAal2CpsSentPkts	The count of AAL2 CPS packets sent to the network.
All Versions	AAL2 CPS Packet Rcv	vismChanAal2CpsRcvdPkts	The count of AAL2 CPS packets received from the network. This does not include the packets which are counted as error packets.

Table E-74   Channel Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	AAL2 Invalid CID CPS	vismChanAal2CpsInvCidPkts	The count of AAL2 CPS packets dropped in the egress direction due to invalid CID (Channel ID). The CID may be considered as invalid if - a) It is out of range. b) It is not configured
All Versions	AAL2 Invalid UUI CPS	vismChanAal2CpsInvUuiPkts	The count of AAL2 CPS packets dropped in the egress direction due to invalid UUI (User-to-User Info.) field.
All Versions	AAL2 Invalid Len CPS	vismChanAal2CpsInvLenPkts	The count of AAL2 CPS packets dropped in the egress direction due to invalid length field.
All Versions	AAL5 Invalid CPI	vismChanAal5InvCpiPdus	The count of AAL5 PDUs dropped in the egress direction due to invalid CPI (common part indicator) field in the AAL5 PDU trailer. This is applicable only to the PVCs configured as AAL5 PVCs (VoIP PVCs or CCS PVCs in the case of VoAAL2 application).
All Versions	AAL5 Oversized SDU PDU	vismChanAal5OversizedSdusRcvdPdus	The count of AAL5 PDUs dropped due to the SDU size bigger than the configured value. This is applicable for AAL5 PVCs only.
All Versions	AAL5 Invalid Len PDU	vismChanAal5InvLenPdus	The count of AAL5 PDUs dropped due to the length violations. This is applicable to the CCS PVCs. The HDLC frames should have a minimum frame size in order for the proper interpretation by the upper layer protocol.
All Versions	AAL5 PDU CRC32 Errors	vismChanAal5Crc32ErrorPdus	The count of AAL5 PDUs dropped in the egress direction due to CRC-32 errors detected by the SAR.
All Versions	AAL5 Reassembly Timer Expired PDU	vismChanAal5ReassemTimerExpiryPdus	The count of AAL5 PDU reassembly timer expirations. The timers are maintained in the egress direction for building an AAL5 PDU from the cells.
cardVersion greater or equal to 3.2.1	24 Hour Peak Xmt Cell Rate	vismChan24HrPeakXmtCellRate	This object counts the peak transmit cell rate (cells per second) for the channel since midnight with reference to node time; the peak cell rate counter gets reset to 0 every 24 hours at midnight. If the node time is changed, the counter will continue to gather data until the next time midnight is reached.
cardVersion greater or equal to 3.2.1	Current Xmt Cell rate	vismChanCurrentXmtCellRate	This object counts the current transmit cell rate (cells per second) for the channel.
cardVersion greater or equal to 3.2.1	24 Hour Peak Rcv Cell Rate	vismChan24HrPeakRcvCellRate	This object counts the peak receive cell rate (cells per second) for the channel since midnight with reference to node time; the peak cell rate counter gets reset to 0 every 24 hours at midnight. If the node time is changed, the counter will continue to gather data until the next time midnight is reached.

Table E-74   Channel Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
cardVersion greater or equal to 3.2.1	Current Rcv Cell Rate	vismChanCurrentRcvCellRate	This object counts the current receive cell rate (cells per second) for the channel.
cardVersion greater or equal to 3.2.1	AIS Suppress Count	vismChanAisSuppressCount	This object holds the number of times that ATM network alarms were successfully suppressed and prevented from propagating onto the TDM side for this PVC.

E.31 VISM-VirtualPort—Supported Real-Time Counters

No Real-Time Counters supported for the VISM-VirtualPort

E.32 Common/Card-MGMGLink—Supported Real-Time Counters

This section includes the following information:

- Gateway Counters
- Command Statistics
- Context Statistics

Table E-75   Gateway Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Messages Count	cmedNumInMessages	Total number of messages received on the link.
All Versions	Out Messages Count	cmedNumOutMessages	Total number of messages sent on the link.
All Versions	Signalling Level Errors Count	cmedNumErrors	Total number of signaling-level errors encountered. Includes, but is not limited to, number of bad messages received, number of failures to sent a message and number of other errors.
All Versions	Timer Recovery Events Count	cmedNumTimerRecovery	Total Number of timer recovery events since the statistics was last reset. This reflects all protocol timers that are supported (For H.248, T - start timer, S - short timer, L - long timer, and Z - long duration timer etc)
All Versions	Last Event Code	cmedxGatewayLastEvent	The event code of the last event occurred on the link.

Table E-76   Command Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Command ADD Fail Count	cmedxCmdNumAddFails	Total number of cumulative ADD commands failed in the media gateway link.
All Versions	Command ADD Succeed Count	cmedxCmdNumAddSucceeds	Total number of cumulative ADD command succeeded in the media gateway link.
All Versions	Command SUBTRACT Count	cmedxCmdNumSubtractFails	Total number of cumulative SUBTRACT commands failed in the media gateway link.
All Versions	Command SUBTRACT Succeed Count	cmedxCmdNumSubtractSucceeds	Total number of cumulative SUBTRACT commands succeeded in the media gateway link.
All Versions	Command MOVE Fail Count	cmedxCmdNumMoveFails	Total number of cumulative MOVE commands failed in the media gateway link.
All Versions	Command MOVE Succeed Count	cmedxCmdNumMoveSucceeds	Total number of cumulative MOVE commands succeeded in the media gateway link.
All Versions	Command MODIFY Count	cmedxCmdNumModifyFails	Total number of cumulative MODIFY commands failed in the media gateway link.
All Versions	Command MODIFY Succeed Count	cmedxCmdNumModifySucceeds	Total number of cumulative MODIFY commands succeeded in the media gateway link.
All Versions	Command AUDIT VALUE Count	cmedxCmdNumAuditValFails	Total number of cumulative AUDIT VALUE commands failed in the media gateway link.
All Versions	Command AUDIT VALUE Succeed Count	cmedxCmdNumAuditValSucceeds	Total number of cumulative AUDIT VALUE commands succeeded in the media gateway link.
All Versions	Command AUDIT CAPABILITY Count	cmedxCmdNumAuditCapFails	Total number of cumulative AUDIT CAPABILITY commands failed in the media gateway link.
All Versions	Command AUDIT CAPABILITY Succeed Count	cmedxCmdNumAuditCapSucceeds	Total number of cumulative AUDIT CAPABILITY commands succeeded in the media gateway link.
All Versions	Command NOTIFY Count	cmedxCmdNumNotifyFails	Total number of cumulative NOTIFY commands failed to respond from MGC.
All Versions	Command NOTIFY Succeed Count	cmedxCmdNumNotifySucceeds	Total number of cumulative NOTIFY commands successfully responded from the MGC.
All Versions	Command Service Change from MGC to MG Fail Count	cmedxCmdNumSrvChgFromMgcFails	Total number of cumulative ServiceChange commands from MGC to MG failed in the media gateway link.
All Versions	Command Service Change from MGC to MG Succeed Count	cmedxCmdNumSrvChgFromMgcSucceeds	Total number of cumulative ServiceChange commands from MGC to MG succeeded in the media gateway link.

Table E-76   Command Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Command Service Change from MG to MGC Fail Count	cmedxCmdNumSrvChgFromMgFails	Total number of cumulative ServiceChange commands from MG to MGC failed in MGC.
All Versions	Command Service Change from MG to MGC Succeed Count	cmedxCmdNumSrvChgFromMgSucceeds	Total number of cumulative ServiceChange commands from MG to MGC succeeded in MGC.

Table E-77   Context Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Active Contexts Count	cmedxCntxNumActiveContexts	The current number of active contexts in the media gateway link.
All Versions	Peak Active Contexts Count	cmedxCntxPeakNumActiveContexts	Peak number of active contexts in the media gateway link.
All Versions	Context Allocated Count	cmedxCntxNumContextAllocated	Total number of contexts has been allocated in the media gateway link.
All Versions	Context Freed Count	cmedxCntxNumContextFreed	Total number of contexts has been freed in the media gateway link.
All Versions	Shortext Context Life Span	cmedxCntxShortestContextLife	The shortest life span for the contexts in the media gateway link.
All Versions	Average Context Life Span	cmedxCntxAverageContextLife	The average life span for the contexts in the media gateway.
All Versions	Longest Context Life Span	cmedxCntxLongestContextLife	The longest life span for the contexts in the media gateway.
All Versions	Contexts with more than 2 Terminations	cmedxCntxNumCntxMoreThan2Terms	The number of contexts having more than 2 terminations in the media gateway link.

E.33 Common/Card-VxsmXgcp—Supported Real-Time Counters

This section includes the following information:

- XGCP Counters

Table E-78   XGCP Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Successful Messages	cXgcpMsgStatsSuccessMessages	This object indicates the count of successful messages that communicate with the Media Gateway Controller
All Versions	Fail Messages	cXgcpMsgStatsFailMessages	This object indicates the count of failed messages that communicate with the Media Gateway Controller
All Versions	Incomplete Messages	cXgcpMsgStatsIncompleteMessages	This object indicates the count of incomplete messages that communicate with the Media Gateway Controller

E.34 Common/Card-VxsmCid—Supported Real-Time Counters

This section includes the following information:

- CID Counters—platform EQ NOTARES

Table E-79   CID Counters—platform EQ NOTARES

Applicability	Counter Name	MIB Object Name	Description
All Versions	Sent Packets	catmtCidSentPackets	This object indicates the number of packets sent towards network side since the connection setup.
All Versions	Received Packets	catmtCidRcvdPackets	This object indicates the count of packets received from network side since the connection setup.
All Versions	Sent Octets	catmtCidSentOctets	This object indicates the count of bytes sent towards network side since connection setup.
All Versions	Received Octets	catmtCidRcvdOctets	This object indicates the count of bytes received from network since connection setup.
All Versions	Lost Packets	catmtCidLostPackets	This object indicates the count of packets lost in the egress direction (from the network). This number is computed based on the expected number of packets and the actual number of packets arrived from the network.
All Versions	Jitter	catmtCidJitter	This object indicates the jitter (a.k.a interarrival jitter). This value is determined by the gateway DSP and obtained by the processor running on gateway upon querying the DSP periodically.

Table E-79   CID Counters—platform EQ NOTARES (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	External AIS Count	catmtCidExtAISCnts	This object contains the number of external AIS AAL2 Type3 packets received. External AIS : alarm indication signal associated with a maintenance alarm detected on a defective maintenance span, that is transmitted in the direction of the defect as a substitute for normal signal. The purpose is to show the downstream entities that a defect has been identified and to prevent other maintenance alarms consequent to this first defect.
All Versions	External RAI Count	catmtCidExtRAICnts	This object contains the number of external RAI AAL2 Type3 packets received. External RAI is transmitted upstream from an entity that has detected defects persisting long enough to constitute a received signal failure. External RAI is to report in the backward direction to indicate there is an interruption of service in the forward direction.
All Versions	catmtCidConnAISCnts	catmtCidConnAISCnts	This object contains the number of external connection AIS AAL2 packets received. External Conn AIS is a Alarm Indicating Signal transmitted in the downstream direction from the AAL2 connecting point that first detects the defect affecting the AAL2 connection including defects indicated by the lower layers.
All Versions	External Connection RDI Count	catmtCidConnRDICnts	This object contains the number of external connection RDI AAL2 packets received. External Connection RDI - is a signal transmitted in the upstream direction by an AAL2 endpoint that is in alarm state, as the result of having received an AAL2 connection AIS or having detected a defect that affects the AAL2 connection.
All Versions	Nx64 Frames Xmt To TDM	catmtCidNx64FramesTxToTDM	This object contains the number of frames transmitted to the TDM interface. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	Nx64 Frames Rcv From TDM	catmtCidNx64FramesRxFromTDM	This object contains the number of frames received from the TDM interface. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	Nx64 Encoded Bytes Xmt To TDM	catmtCidNx64EncBytesTxToTDM	This object contains the number of encoded bytes transmitted to the TDM interface.
All Versions	Nx64 Encoded Bytes Rcv From TDM	catmtCidNx64EncBytesRxFromTDM	This object contains the number of encoded bytes received from the TDM interface.

Table E-79   CID Counters—platform EQ NOTARES (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	catmtCidNx64Invalid FCSFrames	catmtCidNx64InvalidFCSFrames	This object contains the number of invalid frames received with invalid Frame Check Sequence (FCS) error. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	catmtCidNx64AbortS eqFrames	catmtCidNx64AbortSeqFrames	This object contains the number of invalid frames received with invalid frame abort sequence error. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	catmtCidNx64Invalid ShortFrames	catmtCidNx64InvalidShortFram es	This object contains the number of invalid short frames (length less than minimum length) received. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	catmtCidNx64Invalid LongFrames	catmtCidNx64InvalidLongFrame s	This object contains the number of invalid long frames (length greater than maximum length) received. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	catmtCidNx64NoByt eAlignErrorFrames	catmtCidNx64NoByteAlignError Frames	This object contains the number of invalid frames received with no byte alignment. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.
All Versions	catmtCidNx64RASTi meOutFrames	catmtCidNx64RASTimeOutFra mes	This object contains the number of frames received with RAS timer timeout. This object is only applicable when catmtCidNx64Mode is set to to 'hdlc'.

E.35 Common/Card-RudpSession—Supported Real-Time Counters

This section includes the following information:

- RUDP Session Counters

Table E-80   RUDP Session Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Number Of Initiated Auto Resets	vismRudpSessionAutoResets	Auto reset is also known as soft reset. VISM (gateway) initiates an auto reset when it detects that a connection has failed. This keeps track of the number of auto resets initiated by VISM.
All Versions	Number Of Received Auto Resets	vismRudpSessionRcvdAutoRese ts	This is the counter for the number of auto resets initiated by MGC and received by VISM.
All Versions	Number Of Packets Received In Sequence	vismRudpSessionRcvdInSeqs	This object indicates number of packets received in sequence.

Table E-80   RUDP Session Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Number Of Packets Received Out Of Sequence	vismRudpSessionRcvdOutSeqs	Number of packets received out of sequence.
All Versions	Number Of Sent Packets	vismRudpSessionSentPackets	This is the number of packets sent by VISM. Including SYN message.
All Versions	Number Of Received Packets	vismRudpSessionRcvdPackets	This is the number of packets received by VISM. Including active message.
All Versions	Number Of Sent Bytes	vismRudpSessionSentBytes	This object indicates the number of bytes sent to MGC.
All Versions	Number Of Received Bytes	vismRudpSessionRcvdBytes	This object keeps track of the number of bytes received from MGC.
All Versions	Number Of Sent Data Packets	vismRudpSessionDataSentPkts	This object is the number of data packets sent to MGC.
All Versions	Number Of Received Data Packets	vismRudpSessionDataRcvdPkts	This object is the number of data packets received from MGC.
All Versions	Number Of Discarded Packets	vismRudpSessionDiscardPkts	This is the number of packets discarded.
All Versions	Number Of Retransmitted Packets	vismRudpSessionRetransPkts	This is the number of packets retransmitted.

E.36 Common/Card-MGMGLink—Supported Real-Time Counters

This section includes the following information:

- Gateway Counters
- Command Statistics
- Context Statistics

Table E-81   Gateway Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	In Messages Count	cmedNumInMessages	Total number of messages received on the link.
All Versions	Out Messages Count	cmedNumOutMessages	Total number of messages sent on the link.
All Versions	Signalling Level Errors Count	cmedNumErrors	Total number of signaling-level errors encountered. Includes, but is not limited to, number of bad messages received, number of failures to sent a message and number of other errors.

Table E-81   Gateway Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Timer Recovery Events Count	cmedNumTimerRecovery	Total Number of timer recovery events since the statistics was last reset. This reflects all protocol timers that are supported (For H.248, T - start timer, S - short timer, L - long timer, and Z - long duration timer etc)
All Versions	Last Event Code	cmedxGatewayLastEvent	The event code of the last event occurred on the link.

Table E-82   Command Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Commad ADD Fail Count	cmedxCmdNumAddFails	Total number of cumulative ADD commands failed in the media gateway link.
All Versions	Command ADD Succeed Count	cmedxCmdNumAddSucceeds	Total number of cumulative ADD command succeeded in the media gateway link.
All Versions	Command SUBTRACT Count	cmedxCmdNumSubtractFails	Total number of cumulative SUBTRACT commands failed in the media gateway link.
All Versions	Command SUBTRACT Succeed Count	cmedxCmdNumSubtractSucceeds	Total number of cumulative SUBTRACT commands succeeded in the media gateway link.
All Versions	Command MOVE Fail Count	cmedxCmdNumMoveFails	Total number of cumulative MOVE commands failed in the media gateway link.
All Versions	Command MOVE Succeed Count	cmedxCmdNumMoveSucceeds	Total number of cumulative MOVE commands succeeded in the media gateway link.
All Versions	Command MODIFY Count	cmedxCmdNumModifyFails	Total number of cumulative MODIFY commands failed in the media gateway link.
All Versions	Command MODIFY Succeed Count	cmedxCmdNumModifySucceeds	Total number of cumulative MODIFY commands succeeded in the media gateway link.
All Versions	Command AUDIT VALUE Count	cmedxCmdNumAuditValFails	Total number of cumulative AUDIT VALUE commands failed in the media gateway link.
All Versions	Command AUDIT VALUE Succeed Count	cmedxCmdNumAuditValSucceeds	Total number of cumulative AUDIT VALUE commands succeeded in the media gateway link.
All Versions	Command AUDIT CAPABILITY Count	cmedxCmdNumAuditCapFails	Total number of cumulative AUDIT CAPABILITY commands failed in the media gateway link.
All Versions	Command AUDIT CAPABILITY Succeed Count	cmedxCmdNumAuditCapSucceeds	Total number of cumulative AUDIT CAPABILITY commands succeeded in the media gateway link.
All Versions	Command NOTIFY Count	cmedxCmdNumNotifyFails	Total number of cumulative NOTIFY commands failed to respond from MGC.
All Versions	Command NOTIFY Succeed Count	cmedxCmdNumNotifySucceeds	Total number of cumulative NOTIFY commands successfully responded from the MGC.

Table E-82   Command Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Command Service Change from MGC to MG Fail Count	cmedxCmdNumSrvChgFromMgcFails	Total number of cumulative ServiceChange commands from MGC to MG failed in the media gateway link.
All Versions	Command Service Change from MGC to MG Succeed Count	cmedxCmdNumSrvChgFromMgcSucceeds	Total number of cumulative ServiceChange commands from MGC to MG succeeded in the media gateway link.
All Versions	Command Service Change from MG to MGC Fail Count	cmedxCmdNumSrvChgFromMgFails	Total number of cumulative ServiceChange commands from MG to MGC failed in MGC.
All Versions	Command Service Change from MG to MGC Succeed Count	cmedxCmdNumSrvChgFromMgSucceeds	Total number of cumulative ServiceChange commands from MG to MGC succeeded in MGC.

Table E-83   Context Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Active Contexts Count	cmedxCntxNumActiveContexts	The current number of active contexts in the media gateway link.
All Versions	Peak Active Contexts Count	cmedxCntxPeakNumActiveContexts	Peak number of active contexts in the media gateway link.
All Versions	Context Allocated Count	cmedxCntxNumContextAllocated	Total number of contexts has been allocated in the media gateway link.
All Versions	Context Freed Count	cmedxCntxNumContextFreed	Total number of contexts has been freed in the media gateway link.
All Versions	Shortext Context Life Span	cmedxCntxShortestContextLife	The shortest life span for the contexts in the media gateway link.
All Versions	Average Context Life Span	cmedxCntxAverageContextLife	The average life span for the contexts in the media gateway.
All Versions	Longest Context Life Span	cmedxCntxLongestContextLife	The longest life span for the contexts in the media gateway.
All Versions	Contexts with more than 2 Terminations	cmedxCntxNumCntxMoreThan2Terms	The number of contexts having more than 2 terminations in the media gateway link.

E.37 VXSM-VT-Path—Supported Real-Time Counters

No Real-Time Counters supported for VXSM-VT-Path

E.38 VXSM-VirtualPort—Supported Real-Time Counters

This section includes the following information:

- Port Counters

Table E-84   Port Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv CLP0 Cells (Egress)	cpAtmIfEgrRcvClp0Cells	The number of CLP-0 cells received from switch at the traffic management and policing device.
All Versions	Rcv CLP1 Cells (Egress)	cpAtmIfEgrRcvClp1Cells	The number of CLP-1 cells received from switch at the traffic management and policing device.
All Versions	Rcv CLP0 Discard Cells (Egress)	cpAtmIfEgrClp0DiscCells	The number of CLP-0 cells discarded due to policing.
All Versions	Rcv CLP1 Discard Cells (Egress)	cpAtmIfEgrClp1DiscCells	The number of CLP-1 cells discarded due to policing.
All Versions	Rcv OAM Cells (Egress)	cpAtmIfEgrRcvOAMCells	The number of OAM cells received from the switch at the traffic management and policing device.
All Versions	Rcv EFCI Cells (Egress)	cpAtmIfEgrRcvEFCICells	The number of EFCI cells received from the switch at traffic management and policing device.
All Versions	Xmt CLP0 Cells (Ingress)	cpAtmIfIngXmtClp0Cells	The number of CLP-0 cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt CLP1 Cells (Ingress)	cpAtmIfIngXmtClp1Cells	The number of CLP-1 cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt EFCI Cells (Ingress)	cpAtmIfIngXmtEFCICells	The number of EFCI cells transmitted to the switch after traffic management and policing in ingress direction.
All Versions	Xmt OAM Cells (Ingress)	cpAtmIfIngXmtOAMCells	The number of OAM loopback cells transmitted to switch after traffic management and policing in ingress direction.

E.39 VXSM-TU-Path—Supported Real-Time Counters

No Real-Time Counters supported for VXSM-TU-Path

E.40 VXSM-TUG3-Path—Supported Real-Time Counters

No Real-Time Counters supported for VXSM-TUG3-Path

E.41 VXSM-STS-Path—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily EQ MPSM

Table E-85   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.

Table E-85   Atm Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-86   Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
cardFamily NE VXSM AND cardFamily NE SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily NE VXSM AND cardFamily NE SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-87   Path Current 24 Hour Counters—cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

E.42 VXSM-STM-Path—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily EQ MPSM

Table E-88   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.

Table E-88   Atm Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-89   Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.

Table E-89   Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-90   Path Current 24 Hour Counters—cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

E.43 VXSM-SONET-Line—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Section Current Counters
- Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM
- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM
- Section Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM
- Alarm Statistics

Table E-91   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.

Table E-91   Atm Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-92   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetLineCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	SESs	sonetLineCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	CVs	sonetLineCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Line in the current 15 minute interval.
All Versions	UASs	sonetLineCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a SONET/SDH Line in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndLineCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndLineCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-92   Line Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndLineCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndLineCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Medium/Section/Line interface in the current 15 minute interval.

Table E-93   Section Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetSectionCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SESs	sonetSectionCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	SEFSs	sonetSectionCurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds encountered by a SONET/SDH Section in the current 15 minute interval.
All Versions	CVs	sonetSectionCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Section in the current 15 minute interval.

Table E-94   Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.

Table E-94   Path Current Counters—cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-95   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsLineCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsLineCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsLineCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsLineCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
All Versions	ESs (Far End)	cwsFELineCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
All Versions	SESs (Far End)	cwsFELineCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.

Table E-95   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CVs (Far End)	cwsFELineCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
All Versions	UASs (Far End)	cwsFELineCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-96   Section Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsSectionCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsSectionCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	SEFs	cwsSectionCurrent24HrSEFSs	Number of SEFS encountered in current 24 hour interval.
All Versions	CVs	cwsSectionCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.

Table E-97   Path Current 24 Hour Counters—cardFamily not equal to AXSM AND cardFamily not equal to AXSMXG AND cardFamily not equal to VXSM AND cardFamily not equal to MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.

Table E-98   Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
All Versions	Section LOSs	cssLOSs	The number of Loss of signals(LOS) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Section LOFs	cssLOFs	The number of Loss of Frames (LOF) encountered by a SONET/SDH Section. A high value for this object may indicate a problem with the Sonet Section layer.
All Versions	Line AISs	cslAISs	The number of alarm indication signals(AIS) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
All Versions	Line RFIs	cslRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Line. A high value for this object may indicate a problem with the Sonet Line layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path AISs	cspAISs	The number of alarm indication signals (AIS) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.
(cardFamily not equal to MPSM) OR (cardFamily EQ MPSM AND entityType EQ PATH)	Path RFIs	cspRFIs	The number of remote failure indications (RFI) encountered by a SONET/SDH Path. A high value for this object may indicate a problem with the Sonet Path layer.

E.44 VXSM-EndPoint-Connection—Supported Real-Time Counters

This section includes the following information:

- Channel Counters

Table E-99   Channel Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	Xmt CLP0 (Ingress)	cwacsIngXmtCLP0	The number of valid CLP=0 ATM cells in the ingress direction of this Channel after the traffic management entity.
All Versions	Xmt CLP1 (Ingress)	cwacsIngXmtCLP1	The number of valid CLP=1 ATM cells in the ingress direction of this Channel after the traffic management entity.
All Versions	Xmt CLP0 (Egress)	cwacsEgrXmtCLP0	The number of valid CLP=0 ATM cells in the egress direction of this Channel AFTER the traffic management entity.
All Versions	Xml CLP1 (Egress)	cwacsEgrXmtCLP1	The number of valid CLP=1 ATM cells in the egress direction of this Channel AFTER the traffic management entity.
All Versions	CLP0 COS Discard (Egress)	cwacsEgrCLP0CoSDiscard	The number of valid CLP=0 cells in the egress direction of this Channel that are discarded at the CoS queue due to overflow.
All Versions	CLP1 COS Discard (Egress)	cwacsEgrCLP1CoSDiscard	The number of valid CLP=1 cells in the egress direction of this Channel that are discarded at the CoS queue due to overflow.
All Versions	Rcv EFCI0 (Egress)	cwacsEgrRcvEFCI0	The number of valid EFCI=0 cells in the egress direction of this Channel before CoS queue.
All Versions	Rcv EFCI1 (Egress)	cwacsEgrRcvEFCI1	The number of valid EFCI=1 cells in the egress direction of this Channel before the class of service queue.
All Versions	EFCI0 Discard (Egress)	cwacsEgrEFCI0Discard	The number of valid EFCI=0 cells in the egress direction of this Channel that are discarded at the CoS queue.
All Versions	EFCI1 Discard (Egress)	cwacsEgrEFCI1Discard	The number of valid EFCI=1 cells in the egress direction of this Channel that are discarded at the CoS queue.
All Versions	Rcv OAM (Egress)	cwacsEgrRcvOAM	The number of valid OAM cells in the egress direction of this Channel before the CoS queue.
All Versions	OAM Discard (Egress)	cwacsEgrOAMDiscard	The number of valid OAM cells in the egress direction of this Channel that are discarded at the CoS queue.
All Versions	Rcv RM (Egress)	cwacsEgrRcvRM	The number of valid RM cells in the egress direction of this Channel before the CoS queue.
All Versions	RM Discard (Egress)	cwacsEgrRMDiscard	The number of valid RM cells in the egress direction of this Channel that are discarded at the CoS queue due to overflow.

E.45 VXSM-DS3-Path—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12
- Line Alarm Statistics
- Plcp Counters—cardFcType not equal to 160

Table E-100   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.

Table E-100   Atm Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-101   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	PESs	dsx3CurrentPESs	The counter associated with the number of P-bit Errored Seconds.
cardFamily not equal to AXSMXG	PSESs	dsx3CurrentPSESs	The counter associated with the number of P-bit Severely Errored Seconds.
cardFamily not equal to AXSMXG	SEFSs	dsx3CurrentSEFSs	The counter associated with the number of Severely Errored Framing Seconds.
All Versions	UASs	dsx3CurrentUASs	The counter associated with the number of Unavailable Seconds.
cardFamily not equal to AXSMXG	LCVs	dsx3CurrentLCVs	The counter associated with the number of Line Coding Violations.
cardFamily not equal to AXSMXG	PCVs	dsx3CurrentPCVs	The counter associated with the number of P-bit Coding Violations.
cardFamily not equal to AXSMXG	LESs	dsx3CurrentLESs	The number of Line Errored Seconds.
All Versions	CCVs	dsx3CurrentCCVs	The number of C-bit Coding Violations.
All Versions	CESs	dsx3CurrentCESs	The number of C-bit Errored Seconds.
All Versions	CSESs	dsx3CurrentCSESs	The number of C-bit Severely Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CESs (Far End)	dsx3FarEndCurrentCESs	The counter associated with the number of Far Far End C-bit Errored Seconds.

Table E-101   Line Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CSESs (Far End)	dsx3FarEndCurrentCSESs	The counter associated with the number of Far End C-bit Severely Errored Seconds.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	CCVs (Far End)	dsx3FarEndCurrentCCVs	The counter associated with the number of Far End C-bit Coding Violations reported via the far end block error count.
cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12	UASs (Far End)	dsx3FarEndCurrentUASs	The counter associated with the number of Far End unavailable seconds.

Table E-102   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12

Applicability	Counter Name	MIB Object Name	Description
All Versions	LCVs	cds3LCVCurrent24Hr	The number of LCVs encountered by the line since the start of current 24 hour period.
All Versions	LESs	cds3LESCurrent24Hr	The number LESs encountered by the line since the start of current 24 hour period.
All Versions	PCVs	cds3PCVCurrent24Hr	The number PCVs encountered by the line since the start of current 24 hour period.
All Versions	PESs	cds3PESCurrent24Hr	The number of PESs encountered by the line since the start of current 24 hour period.
All Versions	PSESs	cds3PSESCurrent24Hr	The number of PSESs encountered by the line since the start of current 24 hour period.
All Versions	SEFSs	cds3SEFSCurrent24Hr	The number of SEFSs encountered by the line since the start of the current 24 hour period.
All Versions	UASs	cds3UASCurrent24Hr	The number of UASs encountered by the line since the start of current 24 hour period.
All Versions	CCVs	cds3CCVCurrent24Hr	The number CCVs encounterd by the line since the start of current 24 hour period.

Table E-102   Line Current 24 Hour Counters—cardFamily EQ AXSME OR cardFamily EQ PXM1E OR cardFamily EQ MPSM OR cardFamily EQ FRSM12 (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	CESs	cds3CESCurrent24Hr	The number of CESs encountered by the line since the start of current 24 hour period.
All Versions	CSESs	cds3CSESCurrent24Hr	The number of CSESs encountered by the line since th start of current 24 hour period.
All Versions	LSESs	cds3LSESCurrent24Hr	The number of LSESs (Line severedly errored seconds) encountered by the line since the start of current 24 hour period.

Table E-103   Line Alarm Statistics

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSMXG	LOS Count	cds3RcvLOSCount	The number of times Loss of Signal was detected with or without integrating to LOS alarm.
cardFamily not equal to AXSMXG	OOF Count	cds3RcvOOFCount	The number of times Out of Frame was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds3RAICount	The number of timesRemote Alarm Indication was detected with or without integrating to RAI alarm.
All Versions	CCV Count	cds3CCVCount	The counter associated with the number of C-Bit Coding Violations encountered by a T3/E3 interface.
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FE Count	cds3FECount	The number of Framing Errors encountered by a T3/E3 interface.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	EXZS Count	cds3EXZSCount	The number of Excessive Zeros(EXZ) by a T3/E3 interface. An EXZ is the occurrence of any string of zeros having length equal to or greater than 3 for B3ZS, or any string of zeros having length greater than 4 for HDB3.

Table E-103   Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	LCV Count	cds3LCVCount	The count of both BPVs(Bipolar Violations) and EXZs(Excessive Zeros) encountered by a T3/E3 interface.An EXZ increments the LCV by one regardless of the length of the zero string.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	PCV Count	cds3PCVCount	This is the count of P-bit Coding Violation(PCV) error event encountered by DS3 interface. For all DS3 applications, a coding violation error event is a P-bit Parity Error(PERR) event. The parity errors occur when the calculated parity in the information bits of the DS3 frame does not match up with an expected parity value.
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	CPE Count	cds3CPECount	The number of C-bit parity errors(CPERR) on a DS3 interface. This value is calculated over noninformation bits in the DS3 frame.

Table E-103   Line Alarm Statistics (continued)

Applicability	Counter Name	MIB Object Name	Description
cardFamily not equal to AXSM AND cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to MPSM	FEBE Count	cds3FEBECount	The number of Far End Block Errors(FEBE) encountered by a T3/E3 interface.These include frame alignment errors, multiframe alignment errors, and C-bit parity errors. These errors are generated by the transmitter at the far end, and indicate that the transmitter,cabling or the upstream node is faulty.
cardFamily not equal to AXSME AND cardFamily not equal to AXSMXG AND cardFamily not equal to PXM1E AND cardFamily not equal to SRM AND cardFamily not equal to MPSM	AIS Count	cds3RcvAISCount	The number of times Alarm Indication Signals(AIS) were detected. The AIS indicates that an upstream failure has been detected by the far end.

Table E-104   Plcp Counters—cardFcType not equal to 160

Applicability	Counter Name	MIB Object Name	Description
All Versions	CurrentBIP-8CV	cds3PlcpBip8CVCurrent	The number of BIP-8 code violations (CV) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8CV	cds3PlcpBip8CV24HrBucket	The number of BIP-8 CVs encountered by the line in the last 24 hours.
All Versions	CurrentBIP-8ES	cds3PlcpBip8ESCurrent	The number of BIP-8 Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8ES	cds3PlcpBip8ES24HrBucket	The number of BIP-8 ES encountered by the line in the last 24 hour.
All Versions	CurrentBIP-8SES	cds3PlcpBip8SESCurrent	The number of BIP-8 Severely Errored Seconds(ES) encountered by the line in the current 15 minute period.
All Versions	Current24HrBIP-8SES	cds3PlcpBip8SES24HrBucket	The number of BIP-8 SES encountered by the line in the last 24 hour.
All Versions	CurrentSEFs	cds3PlcpSEFSCurrent	The number of BIP-8 Severely Errored Framing Seconds(SEFS) encountered by the line in the current 15-minute period.

Table E-104   Plcp Counters—cardFcType not equal to 160 (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Current24HrSEFs	cds3PlcpSEFS24HrBucket	The number of BIP-8 SEFS encountered by the line in the last 24 hour.
All Versions	CurrentUAS	cds3PlcpUASCurrent	The number of Unavailable Seconds(UAS) encountered by the line in the current 15-minute period.
All Versions	Current24HrUAS	cds3PlcpUAS24HrBucket	The number of BIP-8 UAS encountered by the line in the last 24 hour.
cardFamily EQ AXSME	BIP-8 Errors	cds3PlcpRcvBip8Count	The number of of BIP-8 errors encountered by the line.
All Versions	Num Of OOF	cds3PlcpRcvOOFCount	The number of times Out of Frame(OOF) was detected with or without integrating to OOF alarm.
cardFamily EQ AXSM AND cardFamily EQ AXSME	Num of RAI	cds3PlcpRcvRAICount	The number of times Remote Alarm Indication(RAI) was detected with or without integrating to RAI alarm.
cardFamily EQ AXSME	Num of FE Count	cds3PlcpFECount	The number of Framing Errors detected.
cardFamily EQ AXSME	Num of FESec	cds3PlcpFESecCount	The number of Framing Error errored seconds.
cardFamily EQ AXSME	Num of SEFESec	cds3PlcpSEFSecCount	The number of Severely errored Framing error seconds.
cardFamily EQ AXSME	Num of FEBE	cds3PlcpFEBECount	The count of Far End Block Errors (FEBE) detected.
cardFamily EQ AXSME	Num of FEBESec	cds3PlcpFEBESecCount	The number of FEBE errored seconds.
cardFamily EQ AXSME	Num of SEFEBESec	cds3PlcpSEFEBESecCount	The number of Severely errored FEBE seconds.

E.46 VXSM-DS1-Path—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Line Alarm Statistics—cardFamily EQ VXSM

Table E-105   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-106   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	dsx1CurrentESs	The number of Errored Seconds.
All Versions	SESs	dsx1CurrentSESs	The number of Severely Errored Seconds.

Table E-106   Line Current Counters (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	SEFSs	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
All Versions	UASs	dsx1CurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
All Versions	PCVs	dsx1CurrentPCVs	The number of Path Coding Violations.
All Versions	LESs	dsx1CurrentLESs	The number of Line Errored Seconds.
cardFcType EQ 602	BESs	dsx1CurrentBESs	The number of Bursty Errored Seconds.
All Versions	LCVs	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
All Versions	ESs (Far End)	dsx1FarEndCurrentESs	The number of Far End Errored Seconds.
All Versions	SESs (Far End)	dsx1FarEndCurrentSESS	The number of Far End Severely Errored Seconds.
All Versions	SEFSs (Far End)	dsx1FarEndCurrentSEFSs	The number of Far End Severely Errored Framing Seconds.
All Versions	UASs (Far End)	dsx1FarEndCurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs (Far End)	dsx1FarEndCurrentCSSs	The number of Far End Controlled Slip Seconds.
All Versions	LESs (Far End)	dsx1FarEndCurrentLESs	The number of Far End Line Errored Seconds.
All Versions	PCVs (Far End)	dsx1FarEndCurrentPCVs	The number of Far End Path Coding Violations.
cardFcType EQ 602	BESs (Far End)	dsx1FarEndCurrentBESs	The number of Far End Bursty Errored Seconds.

Table E-107   Line Alarm Statistics—cardFamily EQ VXSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	LOS Count	cds1LOSCounts	The number of times the Loss Of Signal defect was detected with or without integrating to LOS alarm.
All Versions	OOF Count	cds1OOFCounts	The number of times the Out of Frame (OOF) was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds1RAICounts	The number of times Yellow Alarms was detected with or without integrating to RAI alarm.
All Versions	FE Count	cds1FECounts	The number of Framing Pattern Errors encountered by the DS1 interface.

E.47 VXSM-DS1-Line—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Line Current Counters
- Line Alarm Statistics—cardFamily EQ VXSM

Table E-108   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-109   Line Current Counters

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	dsx1CurrentESs	The number of Errored Seconds.
All Versions	SESs	dsx1CurrentSESs	The number of Severely Errored Seconds.
All Versions	SEFSs	dsx1CurrentSEFSs	The number of Severely Errored Framing Seconds.
All Versions	UASs	dsx1CurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs	dsx1CurrentCSSs	The number of Controlled Slip Seconds.
All Versions	PCVs	dsx1CurrentPCVs	The number of Path Coding Violations.
All Versions	LESs	dsx1CurrentLESs	The number of Line Errored Seconds.
cardFcType EQ 602	BESs	dsx1CurrentBESs	The number of Bursty Errored Seconds.
All Versions	LCVs	dsx1CurrentLCVs	The number of Line Code Violations (LCVs).
All Versions	ESs (Far End)	dsx1FarEndCurrentESs	The number of Far End Errored Seconds.
All Versions	SESs (Far End)	dsx1FarEndCurrentSESs	The number of Far End Severely Errored Seconds.
All Versions	SEFSs (Far End)	dsx1FarEndCurrentSEFSs	The number of Far End Severely Errored Framing Seconds.
All Versions	UASs (Far End)	dsx1FarEndCurrentUASs	The number of Unavailable Seconds.
cardFcType EQ 602	CSSs (Far End)	dsx1FarEndCurrentCSSs	The number of Far End Controlled Slip Seconds.
All Versions	LESs (Far End)	dsx1FarEndCurrentLESs	The number of Far End Line Errored Seconds.
All Versions	PCVs (Far End)	dsx1FarEndCurrentPCVs	The number of Far End Path Coding Violations.
cardFcType EQ 602	BESs (Far End)	dsx1FarEndCurrentBESs	The number of Far End Bursty Errored Seconds.

Table E-110   Line Alarm Statistics—cardFamily EQ VXSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	LOS Count	cds1LOSCounts	The number of times the Loss Of Signal defect was detected with or without integrating to LOS alarm.
All Versions	OOF Count	cds1OOFCounts	The number of times the Out of Frame (OOF) was detected with or without integrating to OOF alarm.
All Versions	RAI Count	cds1RAICounts	The number of times Yellow Alarms was detected with or without integrating to RAI alarm.
All Versions	FE Count	cds1FECounts	The number of Framing Pattern Errors encountered by the DS1 interface.

E.48 VXSM-AU-Path—Supported Real-Time Counters

This section includes the following information:

- Atm Cell Layer Counters—cellLayer EQ true
- Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM
- Path Current 24 Hour Counters—cardFamily EQ MPSM

Table E-111   Atm Cell Layer Counters—cellLayer EQ true

Applicability	Counter Name	MIB Object Name	Description
All Versions	CLP0 Cells (Ingress)	caclInRcvCLP0Cells	The number of cells received on the interface with CLP0 bit set.
All Versions	CLP1 Cells (Ingress)	caclInRcvCLP1Cells	The number of cells received on the interface with CLP1 bit set.
All Versions	Valid OAM Cells (Ingress)	caclInValidOAMCells	The number of valid Operation and Maintainance(OAM) cells received on the interface.
All Versions	Valid OAM Cells (Egress)	caclOutValidOAMCells	The number of Operartion and Maintainance(OAM) cells received by the interface from the switch fabric.
All Versions	Err OAM Cells (Ingress)	caclInErrOAMCells	The number of errored OAM cells received on the interface.
All Versions	Err OAM Cells (Egress)	caclOutErrOAMCells	The number of errored OAM cells received by the interface from the switch fabric.
All Versions	Corrected HecErr Cells (Ingress)	caclInHecErrCorrectedCells	The number of received cells which had HEC errors that were corrected.
All Versions	Non Zero GFC Cells (Ingress)	caclInGfcCells	The number of non-zero GFC cells received on the interface.
All Versions	Invalid VPI/VCI/PTI Cells (Ingress)	caclInVpiVciErrCells	The number of cells received from the interface with unknown Vpi/Vci values.
All Versions	Last Unknown VPI (Ingress)	caclInLastUnknVpi	The last unknown Vpi value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Lask Unknown VCI (Ingress)	caclInLastUnknVci	The last unknown Vci value. This object is valid only if 'caclInVpiVciErrCells' is non-zero.
All Versions	Rcv Valid RM Cells (Ingress)	caclInValidRMCells	The number of Valid RM cells received from the interface.
All Versions	Rcv Valid RM Cells (Egress)	caclOutRcvValidRMCells	The number of Valid RM cells received by the interface from the switch fabric.

Table E-111   Atm Cell Layer Counters—cellLayer EQ true (continued)

Applicability	Counter Name	MIB Object Name	Description
All Versions	Rcv Idle Cells (Ingress)	caclInRcvIdleCells	The number of idle cells received from the interface.
All Versions	Discard HecErr Cells (Ingress)	caclInHecErrDiscCells	Header Error Check (HEC) calculation is used to provide error detection and correction from the ATM cell header. This object is the number of received cells which were discarded because they had HEC errors.

Table E-112   Path Current Counters—cardFamily EQ AXSMXG OR cardFamily EQ VXSM OR cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	sonetPathCurrentESs	The counter associated with the number of Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	SESs	sonetPathCurrentSESs	The counter associated with the number of Severely Errored Seconds encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	CVs	sonetPathCurrentCVs	The counter associated with the number of Coding Violations encountered by a SONET/SDH Path in the current 15 minute interval.
All Versions	UASs	sonetPathCurrentUASs	The counter associated with the number of Unavailable Seconds encountered by a Path in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	ESs (Far End)	sonetFarEndPathCurrentESs	The counter associated with the number of Far End Errored Seconds encountered by a SONET/SDH interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	SESs (Far End)	sonetFarEndPathCurrentSESs	The counter associated with the number of Far End Severely Errored Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	CVs (Far End)	sonetFarEndPathCurrentCVs	The counter associated with the number of Far End Coding Violations reported via the far end block error count encountered by a SONET/SDH Path interface in the current 15 minute interval.
cardFamily not equal to VXSM AND cardFamily not equal to SRM	UASs (Far End)	sonetFarEndPathCurrentUASs	The counter associated with the number of Far End Unavailable Seconds encountered by a SONET/SDH Path interface in the current 15 minute interval.

Table E-113   Path Current 24 Hour Counters—cardFamily EQ MPSM

Applicability	Counter Name	MIB Object Name	Description
All Versions	ESs	cwsPathCurrent24HrESs	Number of errored seconds encountered in current 24 hour interval.
All Versions	SESs	cwsPathCurrent24HrSESs	Number of SESs encountered in current 24 hour interval.
All Versions	CVs	cwsPathCurrent24HrCVs	Number of CVs encountered in current 24 hour interval.
All Versions	UASs	cwsPathCurrent24HrUASs	Number of UASs encountered in current 24 hour interval.
cardFamily not equal to VXSM	ESs (Far End)	cwsFEPathCurrent24HrESs	Number of far end errored seconds encountered in current 24 hour interval.
cardFamily not equal to VXSM	SESs (Far End)	cwsFEPathCurrent24HrSESs	Number of far end SESs encountered in current 24 hour interval.
cardFamily not equal to VXSM	CVs (Far End)	cwsFEPathCurrent24HrCVs	Number of far end CVs encountered in current 24 hour interval.
cardFamily not equal to VXSM	UASs (Far End)	cwsFEPathCurrent24HrUASs	Number of far end UASs encountered in current 24 hour interval.