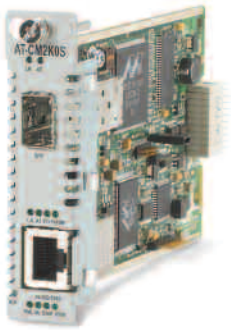

AT-CM2K0S

Converteon™ Series Line Card

AT-CM2K0S
10/100/1000T to SFP media converter line card

Overview

The AT-CM2K0S Converteon blade is designed to extend the distance of your network by interconnecting LAN devices that are physically separated by large distances. These bridging converters have the functionality to connect any managed/unmanaged 10Mbps, 100Mbps, or 1000Mbps (1Gbps) switch or hub using standard 10/100/1000T RJ-45 connections and convert the electrical signal to Gigabit fiber optical signal via its SFP port.

Expanding the Bandwidth

Each AT-CM2K0S bridging converter features a 10/100/1000T twisted pair port and an SFP port. The twisted pair port has an RJ-45 connector and a maximum operating distance of 100 meters (328 feet). These units can operate at half and full-duplex. The AT-CM2K0S fiber optic port has a SFP slot and the maximum operating distance is dependent on the SFP.

Flexible Deployment

The AT-CM2K0S line card can be installed in the complete range of Converteon chassis', allowing them to be deployed in a standalone fashion (AT-CV1000), or in a multi-slot chassis (AT-CV1203 or AT-CV5000). When deployed in a AT-CV5000 chassis, the line cards can be unmanaged, or managed with the inclusion of at least one management card in the chassis. In unmanaged mode, the line cards can be easily configured using DIP switches, where as in a managed chassis, all the configuration can be performed remotely.

Whatever the chassis, the line cards can be hot swapped providing the network manager with a mechanism to simply perform moves/adds/changes without having to power down other parts of the network.

OAM (Operation, Administration and Maintenance)

The AT-CM2K0S supports IEEE 802.3ah OAM features, allowing the device to be remotely configured and maintained in-band from a locally administered AT-CMK20S. The local blade, used in conjunction with a CPM management module, allows network administrators to remotely setup, test, and observe the remote devices without having to dispatch engineers.

Link Test

The link test is a fast and easy way for you to test the connections between the media converter ports and the end-nodes that are connected to the ports. If a network problem occurs, you can perform a link test to determine which port is experiencing a problem, and so be able to focus your troubleshooting efforts on the cable or end-node where the problem resides.

MissingLink™ and Smart MissingLink™ (SML)

The MissingLink (ML) feature allows the ports on the media converter blade to pass the 'Link' status of their connections to each other. When the media converter detects a problem with one of the ports, such as the loss of connection to a node, it shuts down the connection to the other port, thus notifying the node that the connection has been lost. Smart MissingLink (SML) is when a link is lost on a port, the Link LED of the port which still has a valid connection to its end node starts to blink. These features allow network administrators to quickly troubleshoot network problems.

Hassle Free Support

All Allied Telesis Ethernet media converter line cards offer free technical support, ensuring trouble-free installation.

Key Features

- Tri-speed copper to SFP
- IEEE 802.3ah remote loopback, discovery, MIB polling
- Auto MDI/MDI-X
- Auto-negotiation (IEEE 802.3u-compliant)
- 10/100/1000T port transparent to IEEE 802.1Q VLAN packets
- Managed or unmanaged operation
- System and port LEDs
- SNMP
- MissingLink and Smart MissingLink
- Standalone (in AT-CV1000 chassis) or use in multiples (AT-CV1203 or AT-CV5000 chassis)
- Supports SFPs for distances up to 80km
- Rate limiting
- Dying gasp

AT-CM2K0S | Converteon Series Line Card

Technical Specifications

Status Indicators

System LEDs

LED	Color	Description
RDY	Green	The line card has passed diagnostics
	Off	The line card has not passed diagnostics
ML	Green	MissingLink mode is enabled
	Off	MissingLink mode is disabled
SML	Green	Smart MissingLink mode is enabled
	Off	Smart MissingLink mode is disabled
OAM	Green	OAM mode is enabled
	Off	OAM mode is disabled

Port LEDs — 10M copper port speed is implied when both 100M or 1000M are OFF

LED	Color	Description
LK	Green	Link established on the port
	Off	No link established on the port
AT	Green	TX/RX activity detected on the port
	Off	No activity detected on the port
DUP	Green	Copper port operating in full-duplex mode
	Off	Copper port operating in half-duplex mode
100M	Green	Copper port operating at 100Mbps
	Off	Copper port not operating at 100Mbps
1000M	Green	Copper port operating at 1Gigabit
	Off	Copper port not operating 1Gigabit

DIP Switches

The AT-CM2K0S line card features DIP switches to enable/disable the OAM mode.

Table 1. Diagnostic Mode DIP Switches Positions

Operating Mode	DIP 1	DIP 2	DIP 3	DIP 4
Link Test (default)	Off	Off	Off	X
Smart MissingLink (SML)	Off	On	On	X
MissingLink (ML)	Off	Off	On	X
OAM Bypass	On	Off	Off	X
OAM Visible	On	On	Off	X

'X' means the DIP switch position could be either On or Off.

Connectors and Pinouts

10/100/1000T Ethernet Port

Connector	RJ-45
Pinout	Auto MDI/MDI-X
SFP	Fiber optic, Gigabit Ethernet

Ethernet Specifications

MAC address table	8K
Maximum packet size	1632 bytes

Physical Specifications

Dimensions: (W x D x H)	2.2cm x 7.3cm x 13.0cm (0.78" x 2.89" x 5.1")
Weight:	0.54 kg (1.20 lbs)

Power Characteristics

Power consumption	6.8W max

Environmental Specifications

Maximum operating temperature:	0°C to 40°C (32°F to 104°F)
Maximum storage temperature:	-25°C to 70°C (-13°F to 158°F)
Operating and storage altitude:	Up to 3,048 meters (10,000 feet)
Relative humidity operating:	5% to 90% non-condensing
Relative Humidity Storage:	5% to 95% non-condensing

Predicted MTBF (Telcordia SR332): 880,000 hrs

Standards

EMI part 15:
FCC class A, EN55022 class A, VCCI class A, C-Tick, CE

Immunity:
EN55024

Safety:
UL60950-1 (cULUS), EN60950-1 (TUV)

Electrical Interfaces:
ITU-T G.703
ANSI T1.403
ITU-T G.823
AT&T TR62411

Ordering Information

AT-CM2K0S
10/100/1000T to SFP Converteon line card

Related Products

AT-CV1000-xx
One slot Converteon chassis

AT-CV1203-xx
Two slot Converteon chassis

AT-CV5000-xx
18 slot, Converteon chassis

AT-SPxx series
Small Form Pluggable optical modules

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