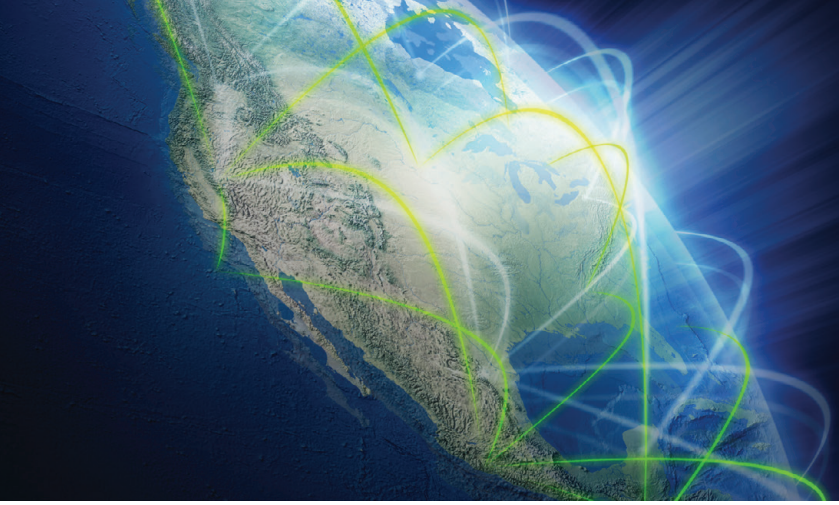


MEDIA LINKS®
Media Defined Networking®

DATASHEET

MD8000 Series - 10G LAN Trunk Module

10G LAN Trunk Module

The 10GigE LAN Trunk Module is a single port 10 Gigabit Ethernet card that connects to the transport network via an optical interface.

KEY FUNCTIONS:

- External optical interface to transport network
- Internal electrical interface to dual MD8000 SW-CNT modules

KEY FEATURES:

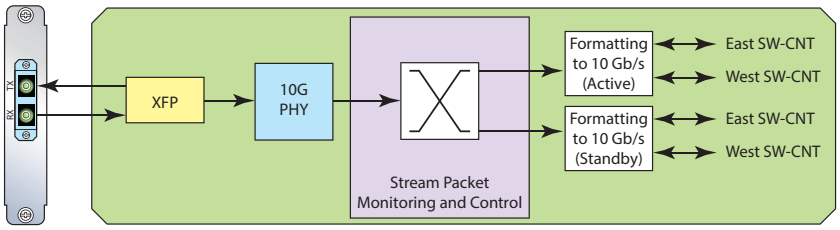
- XFP Optics, single or multi-mode fiber support
- LAN Phy 10.3125 Gbit/s with 64B/66B encoding
- Front panel LED status and error indicators, including TX/RX, link status and errors, power, temperature, maintenance mode
- Efficient stream processing with Jumbo Ethernet frame support
- Full QoS support, including seven priority queues, FEC, hitless switching
- Optical rear connector, SC connectors
- Modular Rear Panel I/O
- On-board diagnostics
- Available 300 meter, 10km, 40km and 80km optical reach

The 10GigE LAN Trunk Module is a single port 10 Gigabit Ethernet card that connects to the transport network via an optical interface. The optical connection is made using a small form factor pluggable transceiver (XFP) that is available in the following reaches: 300 meters, 10km, 40km and 80km. For DWDM networks, an XFP is also available with a reach up to 80km.

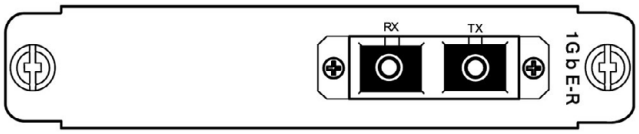
The 10GigE LAN Trunk Module is designed to handle jumbo Ethernet frames up to 9022 byes in length (including headers and FCS). Transmission of data to the MD8000 dual switch controllers is accomplished using a 10Gbps internal electrical interface to the chassis backplane.

Using a mid-plane chassis architecture, the 10GigE LAN Trunk Module uses a separate optical rear board to connect to the transport network.

MD8000 - 10G LAN Trunk Module

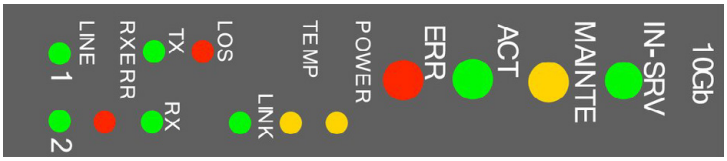


MD8000 - 10G LAN Trunk Module Block Diagram



NAME	TYPE	DESCRIPTION
TX	SC	10 Gbps Ethernet Output
RX	SC	10 Gbps Ethernet Output

Optical Rear Board Connectors



NAME	CONDITION TO ILLUMINATE
IN-SRV	Status Monitored
MAINTE	Under Maintenance
ACT	Normal Operation
ERR	Board Failure Detected
POWER	Board Power Voltage Low (Warning)
TEMP	Board Temperature High (Warning)
LINK	Sync Pattern Sensed
LOS	Loss of Signal
TX/RX	TX: Transmitting RX: Receiving
RXERR	Receiving Error Detected
LINE1/2	SWCNT for the selected channel: 1: SWCNT#1; 2: SWCNT#2

Front Panel LEDs

APPLICATIONS FOR THE MD8000 - 10G LAN Trunk Card

- Carrier Class Media Networks
- High Performance Studio Interconnects
- Flawless Contribution Video Transport
- Reliable Content Delivery Systems
- Integrated Live, Recorded and File-Based Communications
- Metropolitan Distribution Networks connectivity for cost-effective transport

FUNCTIONAL SPECIFICATIONS:

Item			0Gb-SR (300 m)	10Gb-LR (10km)	10Gb-ER (40 km)	10Gb-ZR (80 km
Physical Characteristics	Transport Media		Multi mode Fiber	Single mode		
	No. of core wires used		2 (1 for In and 1 for Out)			
	Connector Type		SC			
Optical Characteristics	Data Rate		10.3125 Mbps			
	Wavelength		840 – 860 nm	1260 – 1355 nm	1530 – 1565 nm	
	Input Level	Max	– 1.0 dBm	+ 0.5 dBm	– 1.0 dBm	– 7.0 dBm
		Min	– 9.9 dBm	– 14.4 dBm	– 15.8 dBm	– 24.0 dBm
	Output Level	Max	- 1.0 dBm	+ 0.5 dBm	+ 4.0 dBm	+ 4.0 dBm
		Min	– 7.3 dBm	– 8.2 dBm	– 4.7 dBm	0.0 dBm

ORDERING INFORMATION

MODEL	ORDER NUMBER	ORDER CODE
10GigE LAN Trunk Module	MD802704	10 GEther-1Trunk-F(no Opt.)+JP

OPTICAL PLUG-IN (XFP)

MODEL	ORDER CODE
10GbE XFP Optical Module, 850 nm, 300 m, ROHS, Digital Diagnostics	XFP-850-300
10GbE, OC-192, STM-64 XFP Optical Module, 1310 nm, 10 km, ROHS, Digital Diagnostics	XFP-1310-10
10GbE, OC-192, STM-64 XFP Optical Module, 1550 nm, 40 km, ROHS, Digital Diagnostics	XFP-1550-40
10GbE, OC-192, STM-64 XFP Optical Module, 1550 nm, 80 km, ROHS, Digital Diagnostics	XFP-1550-80
10GbE, OC-192, STM-64 XFP Optical Module, DWDM, 80 km XX for ITU Channel Number, ROHS, Digi. Diagn.	XFP-DWDM-80-XX

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