



MPX-81-EXO

Ethernet Aggregation Card

The MPX-81-EXO Ethernet Aggregation card provides cost-effective and scalable Ethernet transport for up to 8 GbE clients. MEF-compliant E-LINE and E-LAN services are transported efficiently and natively over 10GbE and can be deployed as a point-to-point muxponder or in ring-based configurations with G.8032 Ethernet Ring Protection Switching.

PacketFLEX

Efficient Ethernet service delivery

- GbE aggregation on 10 GbE wavelengths

Deployment flexibility

- Point-to-point Ethernet muxponder
- Carrier Ethernet-based networking

Integrated protection

- Dual line optics plus 50 ms protection switching with G.8032 Ethernet Ring Protection Switching (ERPS)

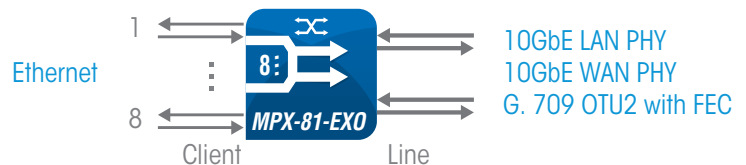
Versatile line capabilities

- 10GbE LAN PHY
- 10GbE WAN PHY
- G.709 OTU2 with FEC

MEF certified

- E-LINE (point-to-point)
- E-LAN (multipoint-to-multipoint)

The MPX-81-EXO Ethernet aggregation card offers 8 SFP ports supporting Fast and Gigabit Ethernet clients and two XFP 10 Gb/s ports. Flexible line strategies allow simple integration into a variety of networks and applications through the support of 10 GbE (LAN PHY/WAN PHY) and software-selectable G.709 OTN encapsulation.



With OTN encapsulation the MPX-81-EXO offers enhanced capabilities including extended reach using Forward Error Correction (FEC), protection switching based on signal quality, performance monitoring and alarming.

G.8032 Ethernet Ring Protection Switching (ERPS) on high-speed ports (10 G) provides sub-50 ms protection switching of services and ensures loop avoidance in ring-based networks.

MPX-81-EXO

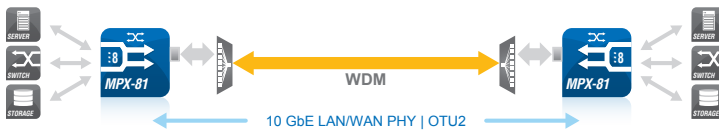
Get more out of your network

The MPX-81-EXO is designed to make CWDM and DWDM networks more efficient, aggregating multiple, lower rate services eliminating per-service utilization of precious network wavelengths. The MPX-81-EXO supports a simple -to-deploy point-to-point muxponder topology as well ring- and linear-based architectures with IEEE 802.1ad Provider Bridging (QinQ) to allow the stacking of a VLAN tags to segment WAN traffic into different customer domains, simplifying the traffic handoff between the customer and service provider, and enhancing network scalability.

Applications

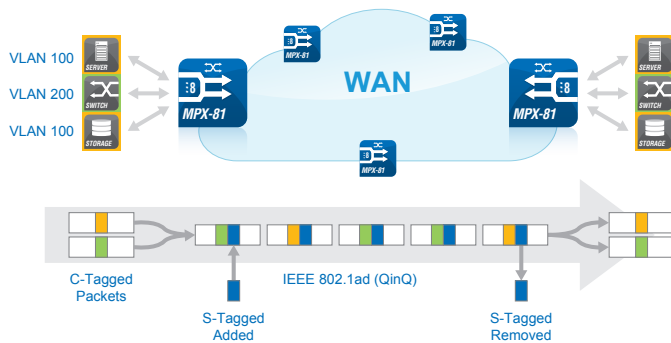
Point-to-point Ethernet muxponder

The MPX-81-EXO provides GbE aggregation of client ports onto a 10 G link for efficient use of WDM wavelengths. Client Ethernet services are mapped such that the client interface on a card is associated with the corresponding interface at the other end of the connection.



Carrier Ethernet networking

In VLAN Tagging mode, the cards use IEEE 802.1ad Provider Bridging (QinQ) to stack a service provider VLAN tag (S-Tag) on top of a customer's existing VLAN tag (C-Tag). This allows segmenting of WAN traffic into different customer domains, simplifying the traffic handoff between the customer and service provider, and enhances network scalability. The S-Tag is added to customer packets on ingress to an MPX-81-EXO network and removed prior to handoff back to the customer LAN infrastructure. MEF-compliant E-LINE and E-LAN service topologies are supported.



Specifications

Client Interfaces	8 SFPs (optical and electrical support)
Ethernet Client protocols	Fast Ethernet (100 Base-X, 100Base-T) Gigabit Ethernet (1000Base-X, 1000Base-T)
Line Interfaces	2 XFPs (including tunable DWDM support)
Line Protocols	Ethernet 10 GbE LAN PHY/WAN PHY G.709 OTN OTU2
Reach Extension	GFEC, EFEC
Wavelengths Supported	850 nm, 1310 nm, 1550 nm, CWDM (8λ), DWDM (40λ)
Carrier Ethernet Features	Provider Bridging IEEE 802.1ad Ring Protection G.8032v2 ERPS Spanning Tree IEEE 802.1D Link Aggregation IEEE 802.3ad
Performance Monitoring	Ethernet Statistics (RX/TX) Forward Error Correction Statistics
Operating Temperature	-5°C to 55°C (23°F to 131°F)

Ordering Information

Part Number	1011-6500
Description	Ethernet Aggregation Card

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