

MXK GPON OLT Line Cards

MXK-GPONX8-IO, MXK-GPONX4-IO

Bandwidth Changes Everything™

✓ Unrivaled GPON port density with 8-port card supports up to 9,216 ONTs per chassis

- ✓ ITU standard GPON
- ✓ Class B+ and Class C SFP optics
- ✓ Layer 2 and 3 features for guaranteed QoS, video replication, and security
- ✓ Fully standards-compliant Smart OMCI management of ONTs
- ✓ Industry-leading SLMS traffic management provides QoS, traffic shaping, and dynamic bandwidth allocation to support video, VoIP, and other applications
- ✓ Full range of management options including SNMP, CLI, WebUI, and integration into Zhone's ZMS Element Management System and OSS Gateway

Industry-Leading OLT Port Density for GPON Networks

Zhone's MXK intelligent terabit access concentrator reflects a clean-sheet approach to truly scalable multi-service architecture, designed to meet the rapidly evolving demands on access networks. MXK platforms offer unmatched bandwidth — with non-blocking capacity of up to 3,600 100Mbps GPON subscribers or 360 1G Active Ethernet subscribers per chassis — while leveraging Zhone's well-proven SLMS access operating system for sophisticated service intelligence and ease of management.

The MXK line includes several options for FTTx network design. Its ITU-standard GPON line card provides 2.5Gbps downstream and 1.25 Gbps upstream bandwidth over a passive optical network on each of 4 or 8 ports per card. Using 64 splits per PON, the largest MXK platform can connect with up to 9,216 ONTs, the industry's highest OLT density.



GPON provides one of the most cost-effective ways for operators to deploy fiber-based services to the home, business, or node. With GPON splitters that can be co-located with at the CO or installed remotely in the network, the service provider can choose the network architecture that finds the right balance between capital cost optimization and ease of upgradeability.

The MXK platforms' non-blocking architecture and intelligent processing enable GPON networks to deliver uncompromising quality for the full range of multi-play services, from multiple HDTV streams, video on demand, and video conferencing, to voice and high-speed internet access.

Zhone's SLMS (Single Line Multi-Service) access operating system provides intelligent functionality across all the company's hardware products. Driven by 8 years of experience in commercial operation and collaboration with 700+ service providers worldwide, Zhone's SLMS software delivers functionality critical to today's access networks in advanced networking, quality of experience, voice, security, and management.

DATASHEET

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Technical Specifications

■ Provided by MXK Chassis

Interfaces

- 4,8 GPON SC Interface (Front Panel)
- 4,8 SFP Ports (Front Panel)

Standards Support

- Bridging 802.1D
- VLAN 802.1Q with 802.1p
- Multicast IGMP v2 and v3 (Snooping, proxy)
- ITU G.984.1- 984.4
- ITU G.988
- IEEE 802.3ah
- IEEE 802.3ad LACP
- DHCP Relay

Management

- ZMS (Zhone Management System) and OSS Gateway, including Smart OMCI for ONT management
- Terminal for Command Line Interface (CLI)
- Built in Web UI

Bandwidth/Distance

- Downstream 2.488Gbps/Upstream 1.244Gbps
- Class B+,C Optics (20Km Max)

Regulatory Compliance

- Safety: UL 60950-1; CSA 60950-1; EN 60950-1
- Emissions: EN 55022A*; PART 15A (FCC)
- Immunity: GR-1089-CORE, Issue 3*; SR-3580, Issue 1*; ATT-TP-76200, Issue 14*; VZ.TPR.9205, Issue 3*
- Environmental: GR-63-CORE, Issue 3*
- *In process

Operating Requirements

- Ambient Operating Temperature: -40°C to 65°C
- Non operating temperature: -40°F to 158°F (-40°C to 70°C)
- Humidity: Up to 85%, non-condensing
- Altitude: -200ft to 16,500ft (-60m to 5,000m)

Ordering Information

GPON Line Cards	
MXK-GPONX4-IO	MXK LINE CARD WITH 4 PORTS OF GPON SFP OPTICS (2.5G DOWNSTREAM/1.25G UPSTREAM) IN EACH PORT
MXK-GPONX8-IO	MXK LINE CARD WITH 8 PORTS OF GPON SFP OPTICS (2.5G DOWNSTREAM/1.25G UPSTREAM) IN EACH PORT
SFPs	
MXK-GPON-SFP-B+-RSSI	MXK GPON SFP B+ OPTICS, SUPPORTS DIGITAL RSSI; USES SC/UPC CONNECTOR
MXK-GPON-SFP-C+-RSSI	MXK GPON SFP C+ OPTICS, SUPPORTS DIGITAL RSSI; USES SC/UPC CONNECTOR (REQ. SW 2.1.2XX OR HIGHER)

