



Enabling the hyper-connected world

MXK-LC-GP16-3

Velocity VX/MXK-F OLT 16xGPON Line Card

Ultra high-capacity fiber-optimized GPON Line Card

Features & Benefits

- 16-port GPON line card w/ 128 splits supports up to 32,768 ONTs per chassis
- + ITU-T Standards compliant
- + Type B PON Protection
- + Class B+ and Class C+/C++ SFP w/RSSI
- + Standards-compliant OMCI for ONT management

The MXK-LC-GP16-3 GPON line card offers one of the most cost-effective ways for operators to deploy fiber-based services to the home, business, MDU, and cell site. The card supports ITU-standard GPON interfaces providing 2.5Gbps downstream and 1.25 Gbps upstream bandwidth over a passive optical network. With pay-as-you grow expansion per port service providers can choose the network architecture that offers the right balance between capital cost optimization and ease of upgradeability.

The MXK-LC-GP16-3 is supported on the Velocity VX and MXK-F OLT broadband access platform. The solution is industrial temperature and can be deployed in some of the harshest and most demanding environments. The VX/MXK-F OLTs offer ultra high-capacity, fiber-optimized aggregation of GPON, XGS-PON, 1GigE, 10GigE and 100GigE services.

Industry-leading traffic management provides QoS, rate limiting, and dynamic bandwidth allocation to support triple-play residential, business services and mobile backhaul applications. Full range of management options including SNMP, CLI, and integration into ZMS Element Management System and OSS Gateway GPON Line Card.

The Ultimate in Density and Flexibility

With 128 splits per PON, one V16 or MXK-F1421 chassis fully equipped with MXK-LC-GP16-3 line card can support up to 32K ONTs concurrently. The GPON OLT line card allows maximum flexibility for operators as they scale and deploy higher densities of PON networks. With GPON splitters that can be co-located at the CO or installed remotely in the network, the service provider can choose the network architecture that offers the right balance between capital cost optimization and ease of upgradeability.

The MXK-LC-GP16-3 leverages the ODN architecture that can be upgraded to higher capacity PONs as demand for bandwidth grows and newer services are introduced. With extended reach, temperature hardened pluggable GPON optical modules the service providers can build network topologies that can cover longer distances in a cost-effective manner.

Features & Benefits

- + FSAN ITU-T G.984 GPON compliant, Class B+ and Class C+ SFP optics with RSSI
- + Type-B redundancy support
- + Sixteen SFP interfaces for GPON modules
- Traffic management provides QoS, traffic rate limiting

- Layer 2 and Layer 3 features, video replication and security
- + Support of Radius proxy, 802.1x, LLDP
- + IPTV multicast, IGMPv2 and IGMPv3 services
- + Designed for outside plant deployment

MXK-LC-GP16-3 GPON Line Card Product Specifications

Interfaces

· Subscriber Line Interfaces: (16 SFP) GPON

Protocol Support

- ITU G.984.1- 984.4, G.988
- Bridging 802.1D
- VLAN 802.1Q with 802.1p
- IGMP v2/v3
- IGMP Snooping with Proxy reporting
- Broadcast Storm Protection
- Bridge Loop Protection
- Transparent L2/L3 VPN for business services

Regulatory Compliance

- Safety
 - EN 62368-1
 - UL 62368-1
- EMC Emissions / Immunity
 - FCC Part 15 Class A
 - AEN 55022 Class A
 - CES-003 Class A
 - EN 300 386

MXK-LC-GP16-3 GPON Line Card

Product Specifications

PHYSICAL	
Specification	Description
Dimensions (H x W x D)	378mm x 22mm x 212mm
Operating temperature	-40~149°F (-40~ +65°C)
Storage temperature	-40~158°F (-40~+70°C)
Operating humidity	5 to 85 % (non-condensing)
ENVIRONMENTAL	
Specification	Description
Altitude	-200ft to 16,500ft (-60m to 5,000m)
Power Requirements	Average 102W typical
Maximum Power	126W (16 SFP transceivers at 1.5W each)

Ordering Information

Base DC Unit	Description
MXK-LC-GP16-3	ROHS, REQ.MIN 3.2.2.6, MXK-F, 2U/14U GPON, (16) GPON PORTS & TOD FEAT
MXK-GPON-SFP-B+-RSSI	GPON SFP B+ OPTICS, SUPPORTS DIGITAL RSSI; USES SC/UPC CONNECTOR, INDUSTRIAL TEMP
MXK-GPON-SFP-C+-RSSI	GPON SFP C+ OPTICS, DIGITAL RSSI; USES SC/UPC CONNECTOR (REQ. SW 2.1.2XX OR HIGHER), I-TEMP
MXK-GPON-SFP-C++-RSSI-CK	REQ MIN MXK 3XX/8XX 2.5.2.337, MXKF 2XX/14XX REQ 3.3.0.120, GPON C++ SFP RSSI, C-TEMP
DNU_MXK-GPON-SFP-C++-RSSI-IK	GPON SFP C++ I-TEMP OPTICS, SUPPORTS DIGITAL RSSI; USES SC/UPC CONN (BUY)

