



# 10GE Line Card

Reimagine Your Edge



## Velocity VX/MXK-F OLT 16x10GigE Line Card V-LC-AETG16

Ultra high-capacity fiber-optimized 10GigE Active Ethernet Line Card

### Features & Benefits

- + High Density card with 720G Switching/Forwarding capacity
- + 100Mbps/1Gbps/10Gbps fiber services selectable port by port
- + Industrial Temperature hardened
- + Supports 802.3ad Link Aggregation Control Protocol

The V-LC-AETG16 Active Ethernet line card offers one of the most cost-effective ways for operators to deploy point-to-point copper and fiber-based services at symmetric 10 Gbps data rates to home, business, or cell sites. The line card supports Ethernet optical interfaces providing 10Gbps downstream and 10Gbps upstream bandwidth over a point-to-point dedicated fiber network. With pay-as-you grow per port expansion service provider can choose the network architecture that offers the right balance between capital cost optimization and ease of upgradeability.

The V-LC-AETG16 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.

Industry-leading traffic management provides QoS, traffic shaping, 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



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## The Ultimate in Density and Flexibility

Active Ethernet line cards support point-to-point copper and fiber-based Ethernet services at symmetric 100 Mbps, 1 Gbps and 10 Gbps data rates. These can be used to aggregate (or subtend) other Ethernet based devices or to provide high-bandwidth services to individual customer premises.

Selection of an Active Ethernet point-to-point architecture equips services providers with a comfortably future-proof infrastructure as demand for individual subscriber data rates continue to rise. The V-LC-AETG16 Active Ethernet single-slot card can connect up to 256 subscribers on a fully configured V16 or MXK-F1421 chassis. The AE OLT line card allows maximum flexibility for operators as they scale and deploy higher densities of fiber networks.

The V-LC-AETG16 leverages dedicated fiber to deliver residential and MEF compliant business services, or high-capacity mobile xHaul. With pluggable SFP interfaces the service providers can offer fixed or variable bandwidth for select customers in a cost-effective manner.

## Key Service Attributes

- + 1.0 and 10 Gbps Active Ethernet connecting DZS G-Series and X-Series AE ONTs
- + Support of single-channel Ethernet MSA compliant compact SFP's and SFP+ modules
- + Sixteen SFP/SFP+ interfaces, maximum capacity of 16 subscribers
- + Support of 10km, 20km and 60km point-to-point AE optical modules
- + Traffic management provides QoS, Rate limiting and Policing
- + Transparent LAN services
- + IPTV multicast, IGMPv2 and IGMPv3 services
- + Designed for outside plant deployment



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## Product Specifications

### Interfaces

- + Subscriber Line Interfaces: (16 SFP+/SFP) 10G/Gig Ethernet

### Protocol Support

- + Port VLAN (802.1D)
- + Tagged VLAN (802.1q)
- + Spanning Tree (802.1D)
- + Rapid Spanning Tree (802.1w)
- + MSTP (802.1s)
- + LACP (802.3ad)
- + IGMzP v2/v3
- + IGMP Snooping with Proxy reporting
- + Broadcast Storm Protection
- + Bridge Loop Protection
- + Transparent L2/L3 VPN for business services
- + L2 ACL (Allow/Deny)
- + Radius
- + RFC 3619 (EAPS)
- + Traffic Rate Limiting
- + Traffic Queuing (8 Priority levels)
- + COS to DSCP Marking
- + Strict Priority (Scheduling)
- + Traffic Policing
- + Traffic Class Mapping (802.1p)

### Regulatory Compliance

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

## Physical & Environmental Specifications

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)

Altitude:	-200ft to 16,500ft (-60m to 5,000m)
Power Requirements	Average 96W typical
Maximum Power	124W (16 SFP+ transceivers at 2W each)

## Ordering Information

Model	Description
V-LC-AETG16	ROHS, REQ.MIN 3.3.0.1, MXK-F, 14U ACTIVE ETHERNET W/16X10G ETHERNET, ANGLED SFP+ BASED
XCVR-AE-SFP+-SBD-1270-40KM-IA	BIDI SFP+ OPTICAL TRANSCEIVER, 10GB/S 1270NM TX 1330NM RX 40KM, DDMI, -40~85 DEG C
XCVR-AE-SFP+-SBD-1330-40KM-IA	BIDI SFP+ OPTICAL TRANSCEIVER, 10GB/S 1330NM TX 1270NM RX 40KM, DDMI, -40~85 DEG C
XCVR-AE-SFP+-SBD-1270-20KM-IA	BIDI SFP+ OPTICAL TRANSCEIVER, 10GB/S 1270NM TX 1330NM RX 20KM, DDMI, -40~85 DEG C, SC/UPC
XCVR-AE-SFP+-SBD-1330-20KM-IA	BIDI SFP+ OPTICAL TRANSCEIVER, 10GB/S 1330NM TX 1270NM RX 20KM, DDMI, -40~85 DEG C, SC/UPC



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