

Reimagine Your Edge



V-LC-AETG16

Velocity VX/MXK-F OLT

16x10GigE Line Card

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.

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 Zhone 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

V-LC-AETG16 10GE Line Card 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 sevices
- 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
 - AEN 55022 Class A
 - CES-003 Class A
 - EN 300 386

V-LC-AETG16 10GE 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 96W typical
Maximum Power	124W (16 SFP+ transceivers at 2W each)

Ordering Information

Base DC Unit	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