Enabling the hyper-connected world

# Management Card

## Velocity VX/MXK-F OLT Management Cards

## MXK-MC-TOP

## MXK-MC-AETG2-TOP

Support of OLT Management Functions in VX/MXK-F OLT Chassis

### Features & Benefits

- Full range of Management options – CLI, SNMP, and integration with ZMS
- Support for carrier-class active/standby redundancy
- Support for both single and redundant configurations
- Ports for Local Craft, Management, Time-of-Day (TOD), and Pulse-per-Second (PPS)
- E1/T1/BITS timing inputs
- Synchronous Ethernet
- 1588v2 Precision Timing Protocol support
- Industrial temperature

The MXK-MC-TOP and MXK-MC-AETG2-TOP management cards are the key to the operation of the high-capacity VX/MXK-F OLT platform. The MXK-MC-TOP supports the highly scalable V14/MXK-F 1419 and V16/MXK-F1421 Chassis. The MXK-MC-AETG2-TOP supports the compact V2/MXK-F219 Chassis. Both cards act as the controller for the VX/MXF-F chassis with all database functions residing on the management card.

The VX/MXK-F OLT Management Cards are typically used in a redundant pair configuration by default designated as Active and Standby. In a redundant configuration, when an active management link goes down the standby link takes over and the state of both cards remains. The MXK-MC-AETG2-TOP cards include two 10GE uplinks and can provide Facility protection in redundant configuration.

In addition to its management duties and user interface support ports, the MXK-MC-TOP and MXK-MC-AETG2-TOP management cards provide synchronization connection points for Synchronous Ethernet, 1588v2, and E1/T1/BITS timing inputs.

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## Carrier Grade Reliability and Ease of use

The MXK-MC-TOP and MXK-MC-AETG2-TOP Management Cards offer a fully distributed database. The boot and upgrade times are exceedingly low to reduce enterprise and service provider OPEX. Since the forwarding plane control does not reside on the Management Card, reboots and upgrade events for VX/MXK-F OLTs are much simpler ensuring an optimal level of both reliability and availability – particularly when optionally equipped with redundant management line cards.

## Key Service Attributes

- Management Card supports redundant configuration: Active and Standby
- Support 2 GigE ports (RJ45) – Local Craft, Management port
- Support 1 port (RJ45) for T1/E1 BITS input
- Support 1 port (RJ45) for TOD
- Support 1 port for PPS
- Support two 10 GigE SFP/SFP+ optical ports for Uplink (MXK-MC-AETG2-TOP only)
- Support configuration database, boot code, system log files
- SNMP V2/V3
- ZMS management interface

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## Features, Protocols, Interfaces

### MXK-MC-AETG2-TOP Interfaces

+ Four 1GigE, RJ45
+ One PPS

### MXK-MC-AETG2-TOP Interfaces

+ Four 1GigE, RJ45
+ One PPS
+ Two 10GigE Ethernet SFP/SFP+ ports.

### Management Interfaces

+ Command Line Interface (CLI)
+ ZMS management interface

### Protocol Support

+ File Transfer Protocol (FTP) RFC 959
+ Secure File Transfer Protocol (SFTP) RFC 2228
+ SNMPv2c,v3, RFC 3411-RFC 3418
+ HTTP / HTTPS
+ Telnet
+ SSH

### 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

# Management Card

## Physical & Environmental Specifications

| | |
|---|---|
| Dimensions (W x H x D) | 188mm 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) |
| MXK-MC-TOP Power | 16W nominal |
| MXK-MC-AETG2-TOP Power | 23W nominal |
| Maximum Power | 29W (2 SFP+ transceivers at 3.0W each) |

# Ordering Information

| Bases | |
|---|---|
| **MXK-MC-TOP** | MXK-F 14U MGMNT CARD WITH E1/T1/BITS/TOP SYNCH |
| **MXK-MC-AETG2-TOP** | MXK-F 2U MGMNT CARD W/2X10G ETH, SFP+/SFP BASED, E1/T1/BITS/TOP SYNCH |

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## Contact DZS today

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