



Enabling the  
hyper-connected world

# MXK-VDSL2-BCM-17A-48-V

## 48-Port VDSL2 Line Card with Vectoring and Bonding

### Features & Benefits

- + Standards Based VDSL2
- + Environmentally Hardened
- + 8a, 8b, 8c, 8d, 12a, 12b, 17a profiles supported
- + ADSL2+ Compatible (ATM and PTM modes)

Zhone's MXK intelligent terabit access concentrator reflects a clean-sheet approach to a truly scalable multi-service architecture that is designed to meet the rapidly evolving demands on access networks. The MXK is a full-featured Multi Service Access Platform enabling service providers to combine data, video and voice in one platform over a pure packet access network. MXK gives carriers the flexibility to cost-effectively deliver triple play services over existing facilities. The MXK VDSL2 48-port line card for the MXK is a high-density high-bandwidth module for the MXK 819/823 and MXK 319 chassis.

Zhone's MXK VDSL2 48-port line card provides VDSL2 speeds which include the ability to provide both symmetric and asymmetric bandwidth. The Broadcom-based MXK VDSL2 48-line card supports up to profile 17a, as well as ADSL2 fallback, link bonding and vectoring. The VDSL2 line card on the MXK also provides ADSL compatibility, allowing service providers to provide both VDSL as well as ADSL service.

The minimum software release required is MXK 2.4.1.131. Zhone's SLMS (Single Line Multi-Service) access operating system provides intelligent functionality across all of 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.

# MXK VDSL2 48-Port Line Card

## Product Specifications

### Power

- 29w Nominal, 53w Maximum (Nominal plus 0.51w per port)

### Interfaces

- 48 Port VDSL2 interfaces connected by two standard 50-pin Amphenols on front of card

### Standards Support

- ANSI T1.413 Issue I and II
- ETSI TR328 and TS101-270
- ITU-T G.992.1 (Annex A, B, C, and I)
- ITU-T G.992.2 (G.lite)
- ITU-T G.992.3 (Annex A, B, J, L, and M)
- ITU-T G.992.5 (Annex A, B, J, and M)
- ITU-T G.993.2 (G.VDSL2)
- ITU-T G.993.5 (G.vector)
- ITU-T G.996.1 (G.test)
- ITU-T G.997.1 (G.PLOAM)
- ITU-T G.998.4 (G.inp)
- ITU-T G.999.1 (T.int)
- G.bond/T1E1.4/2004-334R4
- Provides support for IEEE 802.3ah 10-PASS-TS

### Protocol Support

- RIP v1 (RFC 1058)/RIP v2 (RFC 2453)
- DHCP Server (RFC 2131, 2132)
- DHCP Relay
- Bridging 802.1D
- VLAN 802.1Q
- 802.1p marking and queuing
- Rate limiting

### Management

- Terminals
  - ZMS (Zhone Management System) via SNMP v2c for GUI
  - Terminal for Command Line Interface (CLI)
  - Built-in GUI-based Web Management
- Management Interfaces
  - Out-band IP over 10 / 100 Base-T Ethernet or V.24 serial for async terminal

### 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

### Operating Requirements

- Ambient operating temperature: -40° C to +65°C
- Relative operating humidity: up to 85% (non-condensing)
- GR-487 compliant
- Designed for outside plant deployment

## Ordering Information

Model	Description
<b>MXK-VDSL2-BCM-17A-48-V</b>	48-port VDSL2 line card
<b>MXK-CBL-24-C5-120DG-30FT-BLUNT</b>	25-pair to 30-foot blunt-cut cable (req (2) per line card)
<b>MXK-CBL-24-C5-120DG-50FT-BLUNT</b>	25-pair to 50-foot blunt-cut cable (req (2) per line card)
<b>MXK-CBL-24-C5-120DG-100FT-BLUNT</b>	25-pair to 100-foot blunt-cut cable (req (2) per line card)



Zhone Technologies, Inc