



# V2-LC-NGPC16-5

Reimagine Your Edge



## V2-LC-NGPC16-5 Combination GPON/XGS-PON Line Card

A new generation XCelebrate™ line card with the flexibility to choose GPON, XGS-PON or GPON+XGS-PON (Combo) on a per port basis.

### Features & Benefits

- + 16-port GPON /XGS PON/Combo line card
- + Comprehensive Suite of GPON, XGSPON, Combo Transceivers supported
- + Ports configurable as PON or 10GbE (Active Ethernet)
- + On-board 2 x 100G uplink ports
- + ITU-T Standards compliant

The V2-LC-NGPC16-5 is the latest addition to our portfolio of line cards for use in the MXK-F or Vx series OLT chassis. This new generation XCelebrate™ line card can support 16 interfaces for GPON, XGS-PON or GPON + XGS-PON (Combo) on a per port basis, in a single-slot card design. In addition, ports can be configured as 10GE for Active Ethernet access.

The V2-LC-NGPC16-5 enables service providers to add new 10Gig services alongside GPON to offer choice and keep pace with growing bandwidth demands. Cost effective 10Gig offers an opportunity for revenue growth in business and mobile xHaul applications beyond traditional residential applications with a common fiber network.

The V2-LC-NGPC16-5 can be deployed in MXK-F219/V2 F1419/ V14 and F1421/V16 chassis. It provides up to 256 OLT ports in



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## The Ultimate in Density and Flexibility

With 128 splits per PON, one MXK-F1421/V16 chassis fully equipped with V2-LC-NGPC16-5 line card can support up to 32K ONTs concurrently. The XCelerate™ line card allows maximum flexibility for operators as they transition through different generations of fiber access technologies. It allows them to leverage the existing ODN to offer higher bandwidth XGS-PON services to businesses and homes, or for mobile xHaul. With the co-existence of standard GPON and XGS-PON on the same PON, the service providers can

significantly increase the bandwidth for select customers or sites in a cost-effective manner.

The two 100G ports on the card offers additional uplink capacity and flexibility on how traffic is aggregated.

The option of configuring the any port as 10GE further expands the service offering capability. The 16 access ports can be configured, in a group of 4 for 10GE operation on the line card and used for access or subtending other devices. Until now, the flexibility to add 10gig services to your network required trade-offs in efficiency, density, cost, or all of the above. With the new DZS XCelerate™ line card, YOU define the rules.

## Key Service Attributes

- + FSAN ITU-T G.984 GPON compliant, Class B+ and Class C+ SFP optics with RSSI
- + XGS-PON ITU-T G.9807.1-compliant interface, Class N1 and N2
- + Type-B redundancy support
- + Sixteen SFP+ combo interfaces, GPON, 1GigE, XGS-PON or 10GigE
- + Two 100G QSFP28 Ethernet interfaces
- + Traffic management provides QoS, traffic shaping
- + Layer 2 and Layer 3 features, video replication and security
- + Support of Radius proxy, 802.1x, LLDP
- + IPTV multicast, IGMPv2 and IGMPv3 services



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## Product Specifications

### Interfaces

- + Subscriber Line Interfaces: GPON, XGS-PON, Combo, and 10GE SFP+
- + Two 100G (QSFP28) or 40G (QSFP+)
- + Conversion of 100G (QSFP28) NNI to 25G(SFP28) or 10G (SFP+)

### Protocol Support

- + ITU-T G.984, G.987, G.9807
- + Bridging 802.1D
- + VLAN 802.1Q with 802.1p
- + IGMP
- + IGMP Snooping with Proxy reporting
- + DHCP Relay & DHCP Option 82
- + PPP0E with Intermediate Agent
- + Broadcast Storm Protection
- + Bridge Loop Protection
- + Transparent L2/L3 VPN for business services

### Regulatory Compliance

- + Safety
  - + EN 62368-1
  - + UL 62368-1
  - + CAN/CSA C22.2 No. 62638-1
- + 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 | Nominal Power: 92 W (w/o optics)    |
| Maximum Power      | 116W (without optics)               |

# Ordering Information

| Bases                         |   |
|-------------------------------|---|
| V2-LC-NGPC16-5                | ROHS, REQ MIN. XXX. (16) 10/10 XGS-PON+GPON COMBO (COEXISTENCE) PORT LC, SINGLE SLOT (REQ SFP+ XCVRS) |
| XGS-GP-COMBO-SFP+-B+-N1-OLT-C | XGSPON & GPON COMBO OLT CLASS N1&B+ SFP, 1577/1270NM, 1490/1310NM IRSSI, ROHS, C-TEMP,                |
| XCVR-XGS-ONLY-N2-RSSI-I       | XGSPON OLT 10G SFP+, NO SUPPORT FOR 2.5G UP,1577NM CW MODE DOWN, 1270NM APD/TIA UP, I TEMP, RSSI      |
| XGS-GP-COMBO-SFP+-C+-N2-OLT-I | XGSPON/GPON OLT 10G CEX SFP+, 1577TX 10G, 1490TX 2.5G, 1270RX 10/2.4G, 1310 1.24G, N2 COMBO, I-TEMP   |
| XGS-GP-COMBO-SFP+-E1-OLT-C    | COMBO PON, E1/D, C-TEMP, XGS-GP-COMBO-SFP+-E1-OLT-C   |
| XGS-GP-COMBO-SFP+-C+-N2-OLT-C | XGSPON/GPON OLT 10G CEX SFP+, 1577TX 10G, 1490TX 2.5G,1270RX 10/2.4G, 1310 1.24G, N2 COMBO QUADPLXR   |
| XCVR-AEHG-QSFP28-100M-CA      | QSFP28 100G MMF 850 100M OM4 (70M OM3) OPTICAL XCVR, 0~70 DEG C C-TEMP                                |
| XCVR-AEHG-QSFP28-10KM-CA      | QSFP28 100G SMF 1310 10KM OPTICAL XCVR, 0~70 DEG C-TEMP   |

