

## FLX-1610

### Multi-protocol flexible networking card

The FLX-1610 networking card aggregates and switches Ethernet, SONET/SDH, storage, and video services onto 10G WDM transport wavelengths. This ADM-on-a-blade supports up to 14 services of any protocol on any port, at client rates from 100M to 4G, networked over a single DWDM or CWDM line, in a ring, point-to-point, or linear chain configuration.

#### Any-protocol, any-port design

- High-capacity 10 Gb/s wavelengths

#### Deployment flexibility

- 10 Gb/s or 20 Gb/s muxponder
- Ring and linear ADM

#### Comprehensive client support

- Ethernet
- SONET/SDH
- Storage
- Video

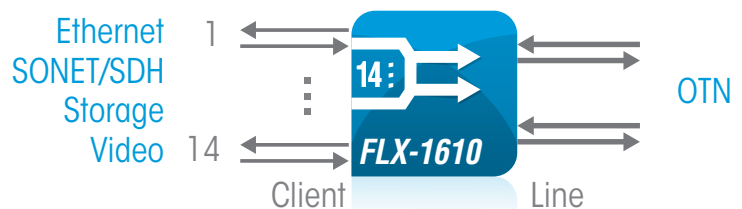
#### Integrated protection

- Dual line optics plus 50 ms per-service protection switching

#### Service-oriented

- Comprehensive network and service performance monitoring

The high-density FLX-1610 networking card offers 14 SFP ports supporting client service rates from 125 Mb/s to 4.25 Gb/s, and two XFP 10 Gb/s line ports. Any combination of rates and protocols can be provisioned, up to a cumulative bandwidth of 10 Gb/s per XFP port.



Integrated protection provides 50 ms per-service protection switching and is complemented by OTN line encapsulation for extended reach with forward error correction. Optical layer, client service, and line performance monitoring capabilities provide extensive network and service visibility.



# FLX-1610

## Get more out of your network

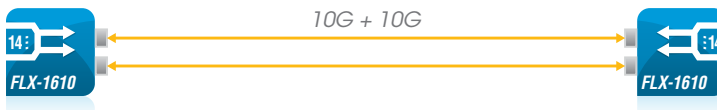
With its feature-rich switching, multiplexing, and ADM capabilities, and the flexibility of dynamically configuring any protocol on any port, the FLX-1610 is a versatile asset that can be deployed in a variety of network locations. The FLX-1610 gives service providers a single cost-effective and efficient platform to quickly turn up and deliver services anywhere needed over the network infrastructure.

## Network topology options

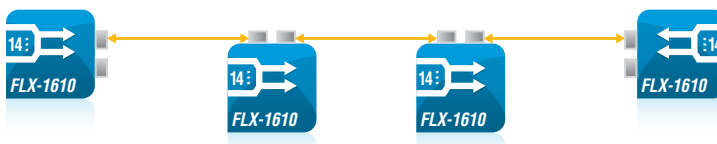
### 10G Muxponder



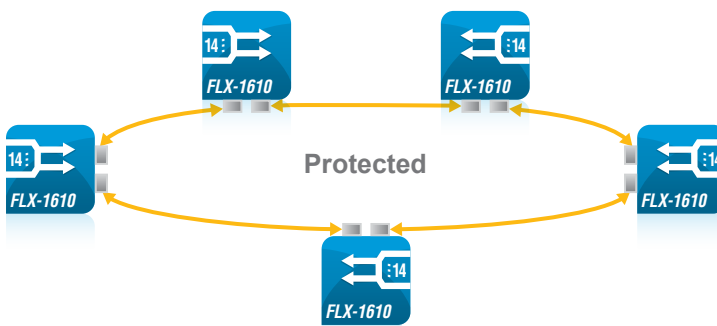
### 20G Muxponder



### Linear ADM Chain



### 10G Shared Ring Mode



## Specifications

<b>Client interfaces</b>	14 SFPs (optical and electrical)
<b>Client data rates</b>	125 Mb/s to 4.25 Gb/s
<b>Client protocols</b>	
<b>SONET/SDH<sup>1</sup></b>	OC-3/STM-1 OC-12/STM-4 OC-48/STM-16
<b>Gigabit Ethernet Fast Ethernet</b>	1000Base-T, 1000Base-X 100Base-X
<b>Storage</b>	1G, 2G, 4G Fibre Channel/FICON
<b>Video</b>	SDI (SD, HD, 3G) DVB-ASI
<b>Line interfaces</b>	2 XFPs (including tunable DWDM)
<b>Line protocols</b>	
<b>OTN G.709</b>	OTU2 (10.75 Gb/s)
<b>Client mapping</b>	Configurable, transparent, or line terminating
<b>Line protection</b>	Unprotected (10G), Protected (10G), Dual line unprotected (20G)
<b>Reach extension</b>	GFEC, EFEC, UFEC
<b>Wavelengths supported</b>	850nm, 1310nm, 1550 nm, CWDM, DWDM
<b>Operating temperature</b>	-5 to 55°C (23 to 131°F)
<b>Extended operating temperature<sup>2</sup></b>	-40 to 65°C (-40 to 149°F)
<b>Compliance</b>	NEBS-3, UL/CSA, FCC Class B

<sup>1</sup> Transparent transmission (maintains client timing) available

<sup>2</sup> Extended temperature range in OMS-2190 Flexible Multi-Service Platform

## Ordering Information

<b>Part Number</b>	1015-6700
<b>Description</b>	FLX-1610 Flexible Networking Card