

PL-2000DC 1.6T Transponder

High capacity platform, for DCI, cloud and colocation providers, and high capacity applications

Features Overview

- Pay-as-you-grow architecture based on pluggable 400G transponder drawers and optical modules
- Supported clients: 100G LAN, OTU4
- Supported FEC modes:
 - Line: GFEC/UFEC + SD-FEC for metro and long haul applications
 - OTU4 service: ITU G.709 GFEC
 - 100GbE service: IEEE Clause 91 RS-FEC
- Standard MSA pluggable:
 - CFP2 ACO tunable DWDM for 100G/200G line interface
 - QSFP28 SR4/ER4/LR4/CWDM4 for 100G client interface
- Comprehensive line and service performance monitoring
- Remote management with in-band GCC, or out-of-band OSC
- Easy maintenance with field-replaceable parts:
 - Dual pluggable power supply units AC/DC
 - Fan unit
 - Equipment controller card

For 200G Short Haul and Metro Applications

The PL-2000DC is a modular and cost-effective solution for rolling out 100G services or increasing existing network capacity. The device has four 400G pluggable drawers and pluggable optical modules, delivering up to 1.6T in a 1U chassis, and enabling pay-as-you-grow architecture.

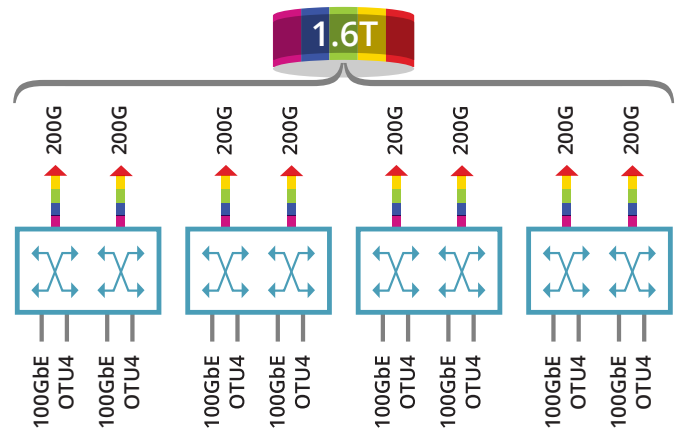


Main Benefits

- **High transport capacity of 1.6T in 1U**
- **Managed service platform**
- **Modular and cost-effective for future growth and maintenance**

Flexible Pay-as-you-grow Architecture, with Redundancy

The solution provides full demarcation point between the service and the uplink DWDM side and is interoperable with any third party switch or router. This provides full visibility and performance monitoring of both line optical transport layer (OTN) and service interfaces 100G LAN/OTU4.



PL-2000DC Diagram - 4 x 400G Pluggable Drawers

Recommended applications:

- 1.6T connectivity for DCI and colocation providers
- 1.6T connectivity for cloud and internet exchange
- High capacity, 16 x 100G managed service platform
- 8 x 100G transponders for carriers' long haul links



Layer-1 encryption

1U

1U rack mount



Cost-effective solution

Technical Specifications

Product Configuration

4 x Drawers: Pluggable, 400G each

Uplink Characteristics

Bit Rate: 2 x 200G (OTUC2)

Optical Interface: 2 x CFP2 ACO

FEC Support: Standard ITU-T G.709 GFEC/UFEC, SD-FEC

Optical Reach: Up to 600 km for 200G, and 4,000 km for 100G

Optical Monitoring: Tx and Rx power

Sensitivity: 100G: -21dBm, 200G: -18dBm

Service Characteristics

Service Types: 4 x 100GbE / OTU4, per single 400G drawer

Optical Interfaces:

QSFP28: LR4 (1310nm) / ER4 (1310nm) / SR4 (850nm) / CWDM4

FEC Support:

- OTU4: ITU-T G.709 GFEC
- 100GbE: RS-FEC

Network Management

Management Ports:

- 3xRJ-45 LAN port 10/100MBase-T
- 2xSFP MNG ports 100/1000MBase-X
- RJ-45 serial port
- OTN in-band GCC channel

Protocols: SNMP v1/v2/v3, HTTP/HTTPS, Telnet/SSH, Syslog, RADIUS, TACACS+, SNMP, TFTP and FTP

Management:

- Web browser over HTTP/HTTPS
- PacketLight LightWatch™ NMS/EMS
- Third party NMS over SNMP
- CLI over RS-232
- CLI over Telnet/SSH

OAM: Facility loopback and PRBS (client and line interfaces), event log, automatic laser shut-down (ALS)

Performance Monitoring:

- Layer-1 PM for all services
- Layer-2 PM for Ethernet
- OTN PM for uplinks
- Optical power Tx and Rx levels for all optical ports

Visual Indicators:

 LED indicators for:

- Client and line ports
- Management and LAN ports
- System critical/major/minor
- Power supply alarms

Software Upgrade: Hitless traffic – dual image

Power Supply

AC/DC: 100 to 240 VAC, 50/60 Hz, -44 to -72 VDC, 540W max (>100W per drawer)

PSU Redundancy: Single/dual feeding, hot swappable

Cooling Unit: Hot swappable fan unit

Environmental

Operating Temperature: -5°C to 50°C (+23°F to +122°F) operational

Humidity: 5% to 85% RH

Physical Dimensions

1U:

- 1.77" (H) x 17.32" (W) x 20.87" (D)
- 45mm (H) x 440mm (W) x 530mm (D)

Weight: 13.66kg / 30.11lb (max)

Mounting: 19"

Approvals & Standards

- CE, FCC
- RoHS, REACH