

PL - 400

Multi-Service CWDM and DWDM Transport Access Device



The Leading 1U Metro CWDM and DWDM platform, for transport of storage, data, voice and video applications, over dark fiber and WDM networks

Features and Benefits

Supports up to 8 channels of CWDM or DWDM over dark fiber

Supports 1G/2G/4G FC & FICON, ESCON, Fast Ethernet, GbE, STM-1/OC-3, STM-4/OC-12, STM-16/OC-48, 2.66G OTN and Video in any mix

Increasing fiber utilization with two sets of 4xGbE Muxponders

Performs bidirectional 3R ensuring error free operation over distance

Cost-effective, compact 1U platform with low power consumption ideal for CLE (Customer Located Equipment)

Remote management with dedicated optical supervisory channels

Pluggable SFP interface for both service and WDM channels

Pluggable- PSUs & Fan Unit

Pay-as-you-grow architecture

Support for 1+1 facility protection

Performance Monitoring for GbE, FC and SONET/SDH services

Support for Single fiber and Dual fiber operation (all fiber types)

PL-400 is designed primarily as an efficient C/DWDM transport device, and is typically deployed as a CLE (Customer Located Equipment) in enterprise campus environments and in central offices.

The PL-400 supports up to 8 high-speed services (2Mbps–4.25Gbps). Each service is configured independently using PacketLight’s user-friendly Web-based management tool.

The PL-400 can be managed by any 3rd party SNMP system or with PacketLight’s EMS

The PL-400 is designed to support point-to-point, Linear ADM, and ring topologies with facility protection.

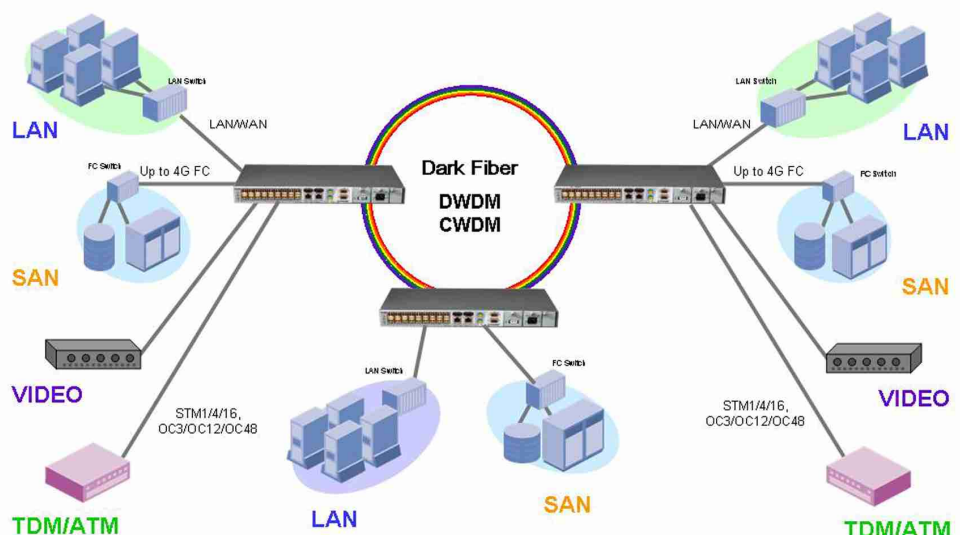
The PL-400 is a highly integrated device, incorporating Mux/DeMux and EDFA for both transponder and regenerator modes.

The PL-400 seamlessly integrates with the PL-1000 and PL-300 thus enabling mixture of low and high bit services over the same fiber and supporting stackable solution operation of up to 32 DWDM, 16 CWDM wavelengths.

All optical transceivers, both on the service side and on the WDM-uplink side, are pluggable and replaceable allowing pay-as-you-grow budget planning and simplified maintenance.

The PL-400 is highly suitable for applications such as:

- Interconnection of SAN and LAN islands over remote metro sites
- High bandwidth managed services over dark fiber
- Fiber relief for high-capacity multi-tenant buildings and campuses
- Aggregation of DSLAM and Ethernet switch traffic on a single fiber from access to core
- DVB-ASI, SMPTE-SDI, SD-HDI, HD-HDI video transport



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Technical Specifications

System

Topology	Point-to-Point, Ring, Linear ADM Dual or Single fiber
Transport Network/Medium	Metro WDM / dark fiber
Software Upgrade	Traffic hitless - dual image
Protection	1+1 Facility

Product Options

Transponder	850/1310nm to C/DWDM, 3R, 4/8 wavelengths Mux & Demux
Transponder + Optical Amp	850/1310nm to DWDM, 3R, 4/8 wavelengths Mux Demux, 1/2 EDFA (Booster, Pre-Amp)
Regenerator	C/DWDM to C/DWDM 3R, 8 wavelengths 2X Mux & 2X Demux & 2X EDFA

CWDM Link

Wavelength	ITU-T G.694.2 1270-1610nm 20nm spacing
Optical Supervisory Channel	For 8 Channels- 1310nm, 1330nm For 16 Channels- 1270nm, 1290nm
Optical Reach	120Km for 1.25Gbps, 80Km up to 4.25Gbps
Optical Output Power	0dBm (min) to 5dBm (max)
Sensitivity	-28dBm APD, -18dBm PIN
Optical Monitoring	Tx & Rx power
Link Attenuation	<4dB (Mux + DeMux)

DWDM Link

Wavelength	ITU-T G.694.1 Channels 15-60, 100GHz spacing
Optical Supervisory Channel	1490nm, 1510nm
Optical Reach	400Km for 1.25Gbps, 200Km for 2.66Gbps, 80Km for 4.25Gbps
Optical Output Power	0dBm (min) to +4dBm (max)
Sensitivity	-28 dBm APD
Optical Monitoring	Tx & Rx power
Link Attenuation	<4dB (Mux + DeMux)

Physical Dimensions

Size	1.77" (1 RU) (H) x 17.32"(W) x 9.05"(D) 45 mm (H) x 440 mm (W) x 230 mm (D)
Weight	5.5Kg (max)
Mounting	19", ETSI and 23"

Amplifier

Applications	Booster, Pre-Amp
Output Power	14dBm, 17dBm, 20dBm, 23dBm
Input Power	-36dBm up to 16dBm
Gain	10dB to 22dB
Operating Modes	AGC (Automatic Gain Control), APC (Automatic Power Control)
Eye Safety	Automatic laser power reduction upon fiber cut or disconnection

Service Side

Interface Rates	2Mbps up to 4.25Gbps
Interfaces	850nm/1310nm C/DWDM
Optical Services	1G/2G/4G FC, FICON, ESCON, GbE (LX, SX), STM-1/OC-3, STM-4/ OC-12, STM-16/OC-48, 2.66G OTN, 100FX and Video, in any mix
Copper Services	10/100/1000MBase-T

Network Management

Management Ports	10/100MBase-T, RJ-45, RS-232 DB-9
Protocols	SNMP, FTP, HTTP
Management	Web server Application, Tivoli ready Integrated with RADview EMS
OAM	<ul style="list-style-type: none"> Loopbacks Event logger Alarms PM for GbE, FC (based on 8b/10b CV) and SONET/SDH (based on B1 CV)
Management Channel	2xOptical Supervisory Channel (OSC)
Visual Indicators	LED status indicators for client ports, line interfaces, power, and system

Power Supply and Fan Unit

Characteristics	90 to 246VAC, -40 to -75VDC, 68W max
PSU Redundancy	Single/dual feeding, pluggable, redundant
Cooling Unit	Hot removable Fan Unit

Environmental

Operating Temperature	-5° C to +50° C (+23° F to +122° F) Operational
Humidity	5% to 85% RH

Approvals & Standards

CE, FCC, RoHS 5/6
NEBS Compliant

