

# PL-300

## Extending Passive Optical Network Solutions



### The PL-300 Family is PacketLight's Passive Optical Solution

#### Features and Benefits

Maximise fiber utilization & capacity with passive optical solution that is simple to install and maintain

Transparent optical Multiplexing of any DWDM or CWDM optical signal regardless of service type and rate

Cost effective, compact, 1U, for 4/8/16/32 WDM Multiplexing solution

Supports a variety of network topologies and addresses add and drop service needs

Provides extended optical reach with dispersion compensation module (DCM)

Seamless operation with PacketLight's PL-400 and PL-1000 to form 32 DWDM stackable solution for multiplexing optical services form 2Mbps up to 10G

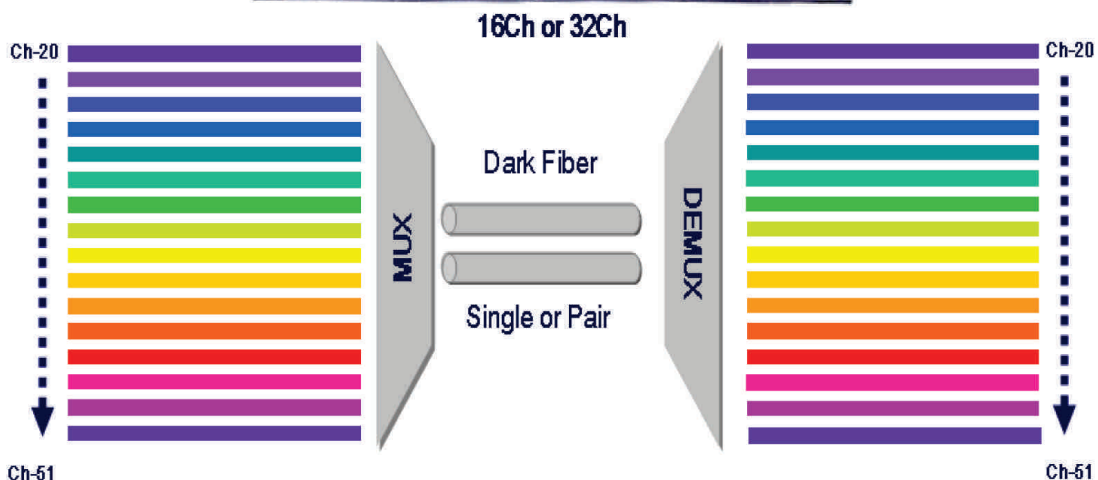
The PL-300 family of products extend PacketLight's optical network solution capabilities by providing a wide range of passive optical modules. The PL-300 provides the needed optical layer functions of 4/8/16/32 DWDM wavelength Multiplexing, 4/8/16 CWDM wavelength Multiplexing, Optical Dispersion Compensation module (DCM), Optical Add and Drop (OADMs), splitter and combiners.

The PL-300 interconnects seamlessly with PacketLight's products PL-400, PL-500 and PL-1000 and third party WDM products to form cost effective high capacity DWDM and CWDM solutions. The PL-300 provides low granularity wavelengths, add and drop capabilities and can be used to increase 4G and 10G solution reach.

The PL-300 is PacketLight's foundation for multi-chassis application architecture. With the PL-300, a customer can start with a low cost solution that meets urgent needs and grow step by step to form a full 32 wavelength solution over a single or dual fiber as demand expands.

PL-300 is highly suitable for applications such as:

- Expansion of existing Fiber capacity with new services
- Building scalable high capacity pay as you grow optical networks
- Convergence of existing networks and new services over existing infrastructure
- Forming low cost fully passive optical solution, transparent to service rate & type
- Extending the optical reach with dispersion compensators
- Building cost effective add and drop networks



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## Extending Passive Optical Network Solutions

### Technical Specifications

#### DWDM Mux/DeMux

##### Number of Channels 32 + OSC (1510nm)

Application	32 wavelengths point to point
Wavelengths range	1525nm - 1565nm C Band
Insertion Loss (Link loss)	7dB
Spacing	100GHz
Standards	ITU G.671,G.694.1

##### Number of Channels 16 + OSC (1510nm)

Application	16 wavelengths point to point
Wavelengths range	C Band
Insertion Loss (Link loss)	6dB
Spacing	100GHz
Standards	ITU G.671,G.694.1

##### Dual 16 Channels + Two OSC (1510nm)

Application	16 wavelengths ring, 16 Wavelengths protected point to point
Wavelengths range	C Band
Insertion Loss (Link loss)	6dB
Spacing	100GHz
Standards	ITU G.671,G.694.1

##### Number of Channels 4/8 + OSC (1510nm)

Application	4/8 wavelengths point to point
Wavelengths range	C Band
Insertion Loss (Link loss)	4dB
Spacing	100GHz
Standards	ITU G.671,G.694.1

#### CWDM Mux/DeMux

##### Number of Channels 16 + OSC (1310nm)

Application	16 wavelengths point to point
Wavelengths range	1270nm - 1610nm
Insertion Loss (Link loss)	6dB
Standards	ITU G.694.2, TU G.671

##### Number of Channels 4/8 + OSC (1310nm)

Application	4/8 wavelengths point to point
Wavelengths range 4	1470nm - 1530nm
Wavelengths range 8	1470nm - 1610nm
Insertion Loss (Link loss)	4dB
Standards	ITU G.694.2, TU G.671

#### Add - Drop

##### Single channel DWDM OADM

Insertion Loss	Express 0.8dB Add/Drop 1 dB
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##### Dual channels DWDM OADM

Insertion Loss	Express 1.3dB Add/Drop 1.5 dB
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##### Quad channels DWDM OADM

Insertion Loss	Express 2.5dB Add/Drop 2.7dB
Standard	ITU G.671

#### DCM

Fiber Type	G.652
Fiber span	20Km - 120Km
Wavelengths range	1527nm -1567nm
Residual dispersion	< +/- 2%
Max insertion loss	4dB
PMD	<1.2ps
Standard	ITU G.671

#### Splitters / Combiners

Insertion Loss - DWDM	1.5dBm
Insertion Loss - CWDM	0.8dBm
Insertion Loss - 1310nm	<1.5dBm
Standard	ITU G.671

#### Physical Dimensions

Size	1.77" (1 RU) (H) x 17.32". (W) x 8.6". (D) 45 mm (H) x 440 mm (W) x 220 mm (D)
Weight	3.5Kg (max)

#### Environmental

Operating Temperature	-5° C to +65° C (+23° F to +149° F) Operational
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#### Approvals & Standards

RoHS 5, ETSI

Meets Telecordia GR- 1209 and GR-122

NEBS Compliant