PL-300

EXTENDING PASSIVE OPTICAL NETWORK SOLUTIONS

The PL-300 Family - PacketLight's Passive Optical Solution For Dual and Single Fiber

FEATURE OVERVIEW

Maximize 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

Support for Single and Dual fiber

Cost effective, compact, 1U, for 4/8/16/32/40 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 40 DWDM stackable solution for multiplexing optical services from 2Mbps up to 10G
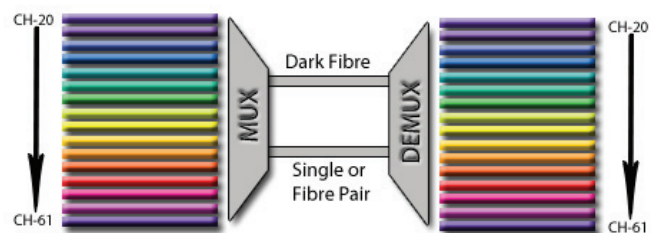
PRODUCT DESCRIPTION

The PL-300 family of products extends 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 4/8/16/32/40 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-1000IL 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 40 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

PL-300 CWDM

Standards	ITU G.694.2, TU G.671					
Description	Order Code CWDM	# MUX WLs	COM Fiber	MUX 1 [nm]	MUX 2 [nm]	Insertion Loss
CWDM 4ch Mux/Dmux	CWDM-1M-4W-1C-2F	4	Dual Fiber	1471-1531		<4db
CWDM 8ch Mux/Dmux	CWDM-1M-8W-1C-2F	8	Dual Fiber	1471-1611		<4db
CWDM 16ch Mux/Dmux	CWDM-1M-16W-1C-2F	16	Dual Fiber	1311-1611		<6db
2 x CWDM 4ch Mux/Dmux	CWDM-2M-4W-2C-2F	4	Dual Fiber	1471-1531	1471-1531	<4db
2 x CWDM 8ch Mux/Dmux	CWDM-2M-8W-2C-2F	8	Dual Fiber	1471-1611	1471-1611	<4db
2 x CWDM 16ch Mux/Dmux	CWDM-2M-16W-2C-2F	16	Dual Fiber	1311-1611	1311-1611	<6db
Single Fiber CWDM 8ch Mux (4 services)	CWDM-1M-8W-1C-1F	8	Single	1471-1611		<4db
Single Fiber CWDM 16ch Mux (8 services)	CWDM-1M-16W-1C-1F	16	Single	1311-1611		<6db
2 x Single Fiber CWDM 8ch Mux (2x 4 services)	CWDM-2M-8W-2C-1F	8	Single	1471-1611	1471-1611	<6db
2 x Single Fiber CWDM 16ch Mux (2x 8 services)	CWDM-2M-16W-2C-1F	16	Single	1311-1611	1311-1611	<6db

PL-300 DWDM

Standards	ITU G.694.2, TU G.671		Spacing- 100GHz		Wavelengths Range- C Band	
Description	Order Code DWDM	# MUX WLs	COM Fiber	MUX 1 [nm]	MUX 2 [nm]	Insertion Loss
DWDM 4ch Mux/Dmux	DWDM-1M-4W-1C-2F	4	Dual Fiber	CH28-CH31		<4db
DWDM 8ch Mux/Dmux	DWDM-1M-8W-1C-2F	8	Dual Fiber	CH28-CH35		<4db
DWDM 16ch Mux/Dmux	DWDM-1M-16W-1C-2F	16	Dual Fiber	CH20-CH35		<6db
DWDM 32ch Mux/Dmux	DWDM-2M-32W-1C-2F	32	Dual Fiber	CH20-CH51	1471-1531	<7db
DWDM 40ch Mux/Dmux	DWDM-2M-40W-1C-2F	40	Dual Fiber	CH20-CH59	1471-1531	<7db
2 x DWDM 4ch Mux/Dmux	DWDM-2M-4W-2C-2F	4	Dual Fiber	CH28-CH31	CH28-CH31	<4db
2 x DWDM 8ch Mux/Dmux	DWDM-2M-8W-2C-2F	8	Dual Fiber	CH28-CH35	CH28-CH35	<4db
2 x DWDM 16ch Mux/Dmux	DWDM-2M-16W-2C-2F	16	Dual Fiber	CH20-CH35	CH20-CH35	<6db
Single Fiber DWDM 8ch Mux (4 services)	DWDM-1M-8W-1C-1F	8	Single	CH28-CH35		<4db
Single Fiber DWDM 16ch Mux (8 services)	DWDM-1M-16W-1C-1F	16	Single	CH20-CH35		<6db
Single Fiber DWDM 32ch Mux (16 services)	DWDM-1M-32W-1C-1F	32	Single	CH20-CH51		<7db
2 x Single Fiber DWDM 8ch Mux (2x 4 services)	DWDM-2M-8W-2C-1F	8	Single	CH28-CH35	1471-1611	<6db
2 x Single Fiber DWDM 16ch Mux (2x 8 services)	DWDM-2M-16W-2C-1F	16	Single	CH20-CH35	CH20-CH35	<6db
2 x Single Fiber DWDM 8ch Mux (2x 8 services) Red/Blue	DWDM-2M-16W-1C-1F	16	Single	CH21-CH36	CH45-CH60	<6db

Add - Drop

Singe Channel DWDM OADM

Insertion Loss	Express 0.8dB Add/Drop 1 dB

Dual Channel DWDM OADM

Insertion Loss	Express 1.3dB Add/Drop 1.5 dB

Quad Channe DWDM OADM

Insertion Loss	Express 2.5dB Add/Drop 2.7dB

Standards	ITU G.671

Splitters/Combiners

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

DCM

Fiber Type	G.652
Fiber Span	20Km - 200Km
Wavelengths Range	1527nm-1567nm
Residual Dispersion	< +/- 2%
Max Insertion Loss	3dB
PMD	<1.2ps
Standard	ITU G.671

Physical Dimensions

Size	1.77" (1 RU) (H) x 17.32"(W) x 9.05"(D) 45 mm (H) x 440mm (W) x 220 mm (D)
Weight	3.5Kg (Max)

Environmental

Operating Temperature	-5°C to +65°C (+23°F to +149°F) Operational

Approvals & Standards

RoHS 5, ETSI
Meets Telicordia GR-12
NEBS Compliant

For further configuration options please contact info@packetlight.com