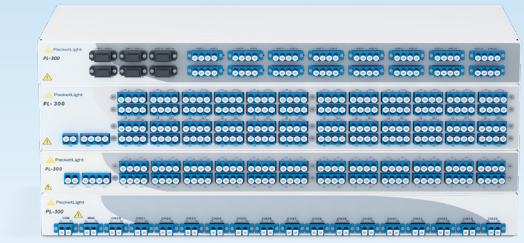


PL-300 Passive DWDM Platform

Up to 96ch Mux / Demux, DCM, OADM in 1U

Features Overview

- Passive transparent any rate, any service multiplexing
- Compliant with all optical networking products (ITU grid)
- DWDM passive optical mux/demux supported configuration: 4/8/16/32/48/64/96 channels
- CWDM passive optical mux/demux supported configuration: 4/8/16 channels
- Integrates up to four DCMs
- OADM for 1-4 wavelengths
- Supports single and dual fiber operation
- Integrates with all PacketLight products
- Stackable solution for multiplexing multiple optical services
- Supports full C-band and L-band
- Supports 150GHz, 100GHz, 75GHz, and 50GHz
- Simple installation and modularity
- Optional TAP Monitoring Port

Main Benefits

- Customized per customer application requirements
- Standards-based and can integrate with third party solutions
- Scalable solution, allowing customers to expand as needed, saving operating costs and resources

Maximize Fiber Utilization & Capacity

The PL-300 provides passive optical layer functions for 4-96 DWDM wavelengths mux/demux, 4-16 CWDM wavelengths mux/demux, optical dispersion compensation module (DCM), optical add and drop (OADMs), splitters and combiners.

The passive optical network products interconnect seamlessly with PacketLight's transponder, muxponder, amplifier and ROADM product lines, and third party WDM products, to form cost-effective high capacity DWDM and CWDM solutions.

Flexibility in Services over the Same Fiber

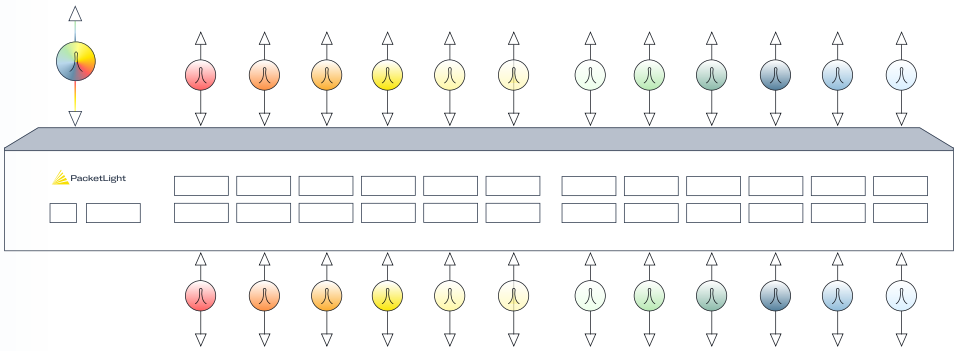
The PL-300 provides high granularity wavelength add and drop capabilities and offers a large set of passive optical modules that are tailored to the customers' network requirements.

The device supports a wide range of CWDM and DWDM mux/demux, OADMs and DCMs in various configurations, suitable for any type of CWDM, DWDM, OTN and ROADM network building block.

Recommended Applications

- Expansion of existing fiber capacity regardless of service type
- Building scalable high capacity pay-as-you-grow optical networks
- Low cost fully passive optical layer solution, transparent to service rate and type
- Extending the fiber optical solution reach for 10G services with DCMs
- Building cost-effective add and drop networks
- Enables stackable solution

PL-300 Passive Product Family



4-96 Wavelengths Mux/Demux, 50/75/100GHz Spacing

PL-300 Passive DWDM Platform

Technical Specifications

	Description	# MUX WLs	MUX 1 [nm]	MUX 2 [nm]	Insertion Loss (Mux + Demux)
CWDM	Dual Fiber 4ch Mux/Demux	4	1471-1531		<4dB
	Dual Fiber 8ch Mux/Demux	8	1471-1611		<4dB
	Dual Fiber 16ch Mux/Demux	16	1311-1611		<6dB
	2 x Dual Fiber 4ch Mux/Demux	4	1471-1531	1471-1531	<4dB
	2 x Dual Fiber 8ch Mux/Demux	8	1471-1611	1471-1611	<4dB
	2 x Dual Fiber 16ch Mux/Demux	16	1311-1611	1311-1611	<6dB
	Single Fiber 8ch Mux	8	1471-1611		<4dB
	Single Fiber 16ch Mux	16	1311-1611		<6dB
	2 x Single Fiber 8ch Mux	8	1471-1611	1471-1611	<4dB
	2 x Single Fiber 16ch Mux	16	1311-1611	1311-1611	<6dB
DWDM	Dual Fiber 4ch Mux/Demux	4	CH28-CH31		<4dB
	Dual Fiber 8ch Mux/Demux	8	CH28-CH35		<4dB
	Dual Fiber 16ch Mux/Demux	16	CH20-CH35		<11dB
	Dual Fiber 32ch Mux/Demux	32	1571.24-1610.49		<6
	Dual Fiber 32ch Mux/Demux	32	1529.358-1566.518		<6
	Dual Fiber 48ch Mux/Demux	48	CH13-CH60		<11dB
	Dual Fiber 64ch Mux/Demux	64	1529.3-1567.1		<12dB
	Dual Fiber 96ch Mux/Demux	96	CH13-CH60.5		<12dB
	2 x Dual Fiber 4ch Mux/Demux	4	CH28-CH31	CH28-CH31	<4dB
	2 x Dual Fiber 8ch Mux/Demux	8	CH28-CH35	CH28-CH35	<6dB
	2 x Dual Fiber 16ch Mux/Demux	16	CH20-CH35	CH20-CH35	<11dB
	Single Fiber 8ch Mux	8	CH28-CH35		<6dB
	Single Fiber 16ch Mux	16	CH20-CH35		<11dB
	Single Fiber 96ch Mux	96	CH13-CH60.5		<12dB
	2 x Single Fiber 8ch Mux	8	CH28-CH35	CH28-CH35	<6dB
	2 x Single Fiber 16ch Mux	16	CH20-CH35	CH20-CH35	<11dB
	2 x Single Fiber 8ch Mux Red/Blue	16	CH21-CH36	CH45-CH60	<12.5dB

DWDM Add/Drop Insertion Loss

Single ch.:
Express 0.8dB, add/drop 1.5dB
Dual ch.:
Express 1.3dB, add/drop 1.5 dB
Quad ch.:
Express 2.5dB, add/drop 2.7dB

Splitters / Combiners Insertion Loss

DWDM: 1.5dB
CWDM: 0.8dB
1310nm: <1.5dB

DCM

Fibre Type: G.652 PMD: <1.2ps
Fibre Span: 20km-200km
Wavelength Range: 1527nm-1567nm
Residual Dispersion: <+/-2%
Max Insertion Loss: 3dB

Environmental

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

Physical Dimensions

1U
1.77" (H) x 17.32" (W) x 9.05" (D)
45mm (H) x 440mm (W) x 220mm (D)
1.5U
2.65" (H) x 17.32" (W) x 9.05" (D)
66mm (H) x 440mm (W) x 220mm (D)
Weight: 5.5kg / 12.13lb (max)

Approvals & Standards

RoHS, REACH, ETSI, Telcordia GR-12, NEBS ready
Standards: ITU G.671

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