Planar Lightwave Circuit Splitter Modules (LGX and Rack-mount Chassis Assembly)

PLCS2 Series

Product Description

Optical Power Splitter is a component that splits the optical power from one optical route into a few different routes according to a certain allocation ratio. Oplink's Planar Lightwave Circuit Splitter Product family provides PLC splitters from 1x4 to 1x64 and 2x4 to 2x64 with high performance and high reliability. Various packaging choices are available based on Oplink's professional mechanical design ability.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module.

Features

◈ Wide Operating Wavelength Range (1310/1490/1550/1620nm)
◈ Ultra-Low Insertion Loss
◈ Low PDL
◈ Excellent IL Uniformity
◈ Compact Size
◈ Telcordia Qualified
◈ RoHS Compliant

Applications

◈ FTTX Solutions
◈ Passive Optical Network (PON)

Options

◈ High Performance Fan-out Available
◈ Module Cassette Available
◈ LGX Packaging Available
◈ 19/23" Rack-mount Chassis Available
◈ Wall-mount Cabinet Available
◈ Outdoor Enclosure Available

Performance Specification

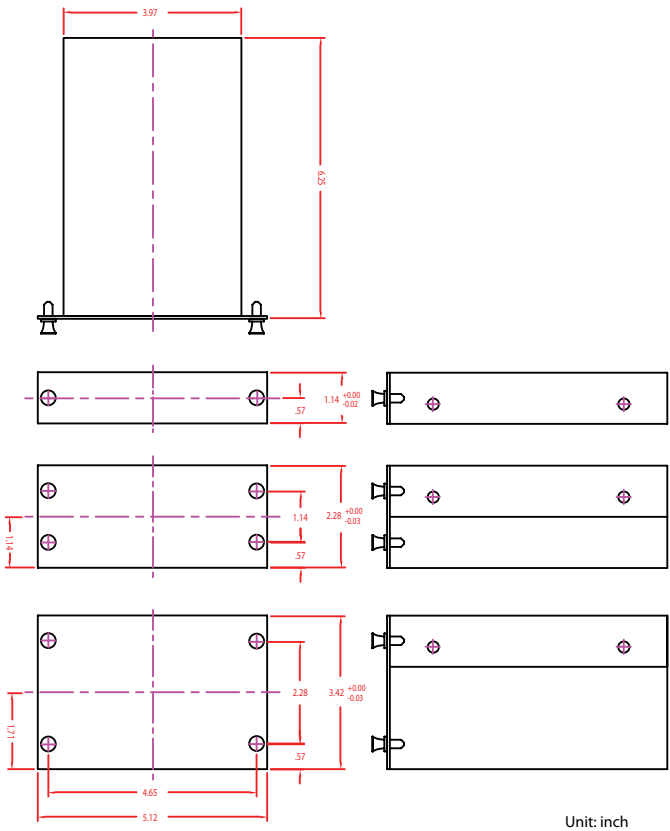| Parameter		1x4	2x4	1x8	2x8	1x16	2x16	1x32	2x32	1x64	2x64	
Operation Wavelength		1260~1360 / 1480~1620										
Insertion Loss (Typ)	S	<7.1	<7.3	<10.3	<10.4	<13.5	<14.0	<16.8	<17.3	19.6	20.3	dB
Insertion Loss (Max)		<7.5	<7.7	<10.8	<11.0	<14.0	<14.5	<17.5	<18.0	20.5	21.0	dB
Insertion Loss (Typ)	P	<6.8	<7.1	<10.0	<10.2	<13.2	<13.6	<16.5	<17.0	19.2	19.8	dB
Insertion Loss (Max)		<7.2	<7.5	<10.3	<10.5	<13.7	<14.2	<17.0	<17.5	20	20.5	dB
Uniformity (Max)		<0.7	<1.0	<1.0	<1.2	<1.5	<2.0	<2.0	<2.5	<2.5	<3.0	dB
Polarization Dependent Loss (Max)		<0.3	<0.3	<0.3	<0.3	<0.3	<0.4	<0.3	<0.4	<0.3	<0.4	dB
Directivity (Min)		55										dB
Return Loss (Min)		≥45dB for PLC splitters with PC&SPC connector type ≥50dB for PLC splitters with APC connector type										dB
Optical Input Power		300										mW
Operating Temperature		-5 to +70										°C
Storage Temperature		-40 to +85										°C
Fiber Type		Corning SMF-28 or equivalent										
Packaging Dimension		LGX or Rack-mount Chassis, refer ordering information for packaging choices										

Notes:
[1] All the parameters are tested at 1310nm&1550nm and room temperature. The IL doesn't include TDL, WDL or the connector loss.
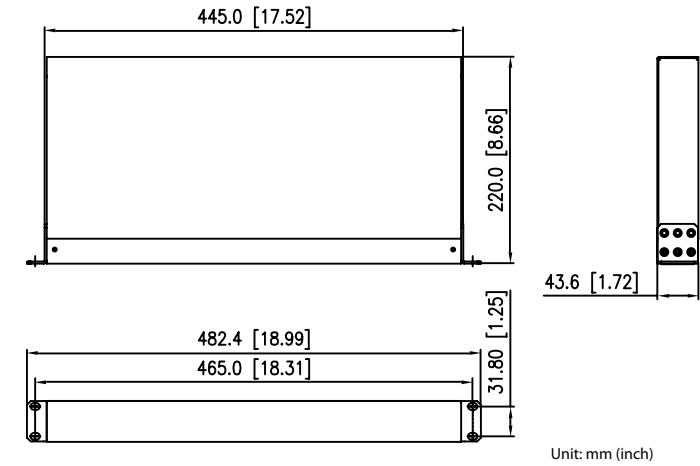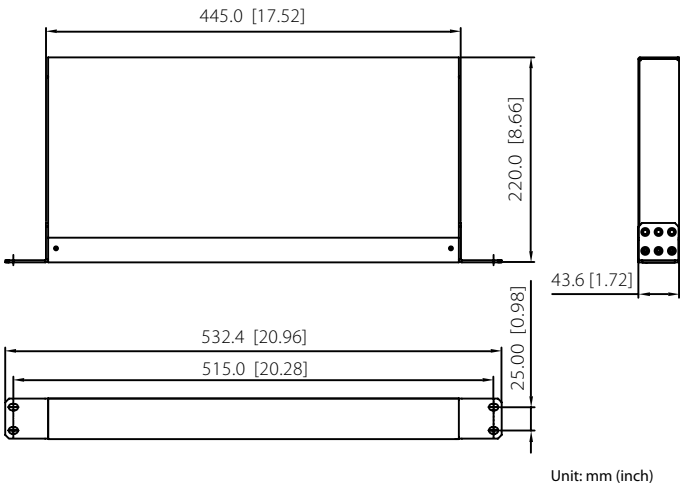[2] Connector IL is 0.2dB/pair for PC&SPC type and 0.4dB/pair for APC type.

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Mechanical Drawing / Package Dimensions

LGX Packaging:

Unit: inch

1RU 19" Rack-mount Chassis:

445.0 [17.52]

220.0 [8.66]

43.6 [1.72]

482.4 [18.99]
465.0 [18.31]
31.80 [1.25]

Unit: mm (inch)

1RU ETSI Rack-mount Chassis:

445.0 [17.52]

220.0 [8.66]

43.6 [1.72]

532.4 [20.96]
515.0 [20.28]
25.00 [0.98]

Unit: mm (inch)

1RU 23" Rack-mount Chassis:

445.0 [17.52]

220.0 [8.66]

43.6 [1.72]

584.0 [22.99]
566.6 [22.31]
31.80 [1.25]

Unit: mm (inch)

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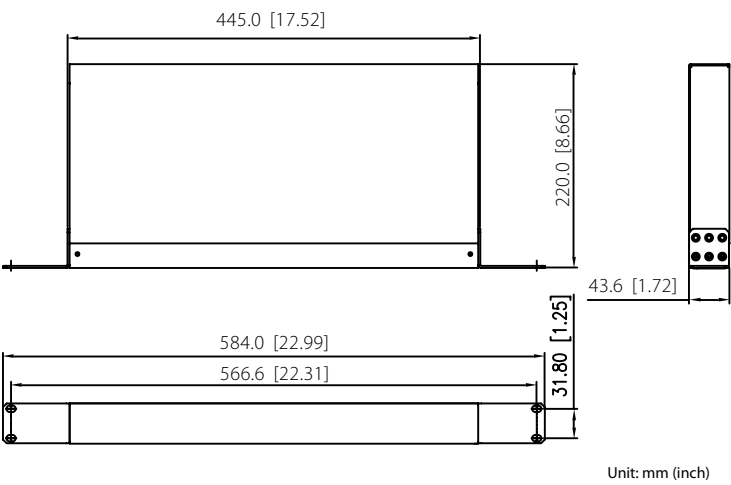
Ordering Information

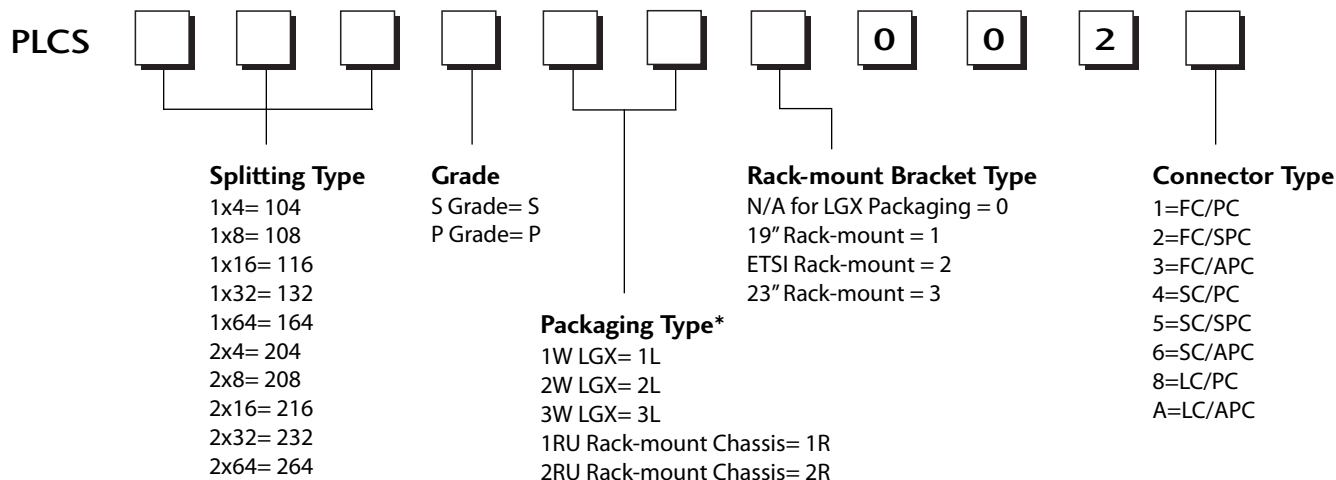Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.

PLCS ☐ ☐ ☐ ☐ ☐ ☐ ☐ **0** **0** **2** ☐

Splitting Type
1x4= 104
1x8= 108
1x16= 116
1x32= 132
1x64= 164
2x4= 204
2x8= 208
2x16= 216
2x32= 232
2x64= 264

Grade
S Grade= S
P Grade= P

Packaging Type*
1W LGX= 1L
2W LGX= 2L
3W LGX= 3L
1RU Rack-mount Chassis= 1R
2RU Rack-mount Chassis= 2R

Rack-mount Bracket Type
N/A for LGX Packaging = 0
19" Rack-mount = 1
ETSI Rack-mount = 2
23" Rack-mount = 3

Connector Type
1=FC/PC
2=FC/SPC
3=FC/APC
4=SC/PC
5=SC/SPC
6=SC/APC
8=LC/PC
A=LC/APC

* Refer the following table for packaging choices.

Splitter Type	Packaging Choices		
	SC Connector Type	**LC Connector Type**	**FC Connector Type**
1x4	1W LGX, 1RU Rack-mount Chassis	1W LGX, 1RU Rack-mount Chassis	1W LGX, 1RU Rack-mount Chassis
2x4	1W LGX, 1RU Rack-mount Chassis	1W LGX, 1RU Rack-mount Chassis	1W LGX, 1RU Rack-mount Chassis
1x8	2W LGX, 1RU Rack-mount Chassis	1W LGX, 1RU Rack-mount Chassis	2W LGX, 1RU Rack-mount Chassis
2x8	2W LGX, 1RU Rack-mount Chassis	1W LGX, 1RU Rack-mount Chassis	2W LGX, 1RU Rack-mount Chassis
1x16	3W LGX, 1RU Rack-mount Chassis	2W LGX, 1RU Rack-mount Chassis	3W LGX, 1RU Rack-mount Chassis
2x16	3W LGX, 1RU Rack-mount Chassis	2W LGX, 1RU Rack-mount Chassis	3W LGX, 1RU Rack-mount Chassis
1x32	1RU Rack-mount Chassis	1RU Rack-mount Chassis	1RU Rack-mount Chassis
2x32	1RU Rack-mount Chassis	1RU Rack-mount Chassis	1RU Rack-mount Chassis
1x64	1RU Rack-mount Chassis	1RU Rack-mount Chassis	2RU Rack-mount Chassis
2x64	1RU Rack-mount Chassis	1RU Rack-mount Chassis	2RU Rack-mount Chassis

In order to meet different rack-mount applications, additional rack-mount brackets are also available. Please refer the following table for ordering information.

Oplink Part Number	Product Description
OMSSBR19IEC0000	1RU 19" Rack-mount Brackets (one pair)
OMSSBRETSI00000	1RU ETSI Rack-mount Brackets (one pair)
OMSSBR230000000	1RU 23" Rack-mount Brackets (one pair)

Product Lines: ❖ Mux/Demux ❖ Switching/Routing ❖ Coupling/Splitting ❖ Monitoring/Conditioning ❖ Amplification ❖ Transmission ❖ Interconnect ❖ RGB Laser Modules