

# PLANAR LIGHTWAVE CIRCUIT SPLITTERS

## PLCS1 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 2x32 with high performance and high reliability.

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	
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	dB
Insertion Loss (Max)		<7.5	<7.7	<10.8	<11.0	<14.0	<14.5	<17.5	<18.0	20.5	dB
Insertion Loss (Typ)	P	<6.8	<7.1	<10.0	<10.2	<13.2	<13.6	<16.5	<17.0	19.2	dB
Insertion Loss (Max)		<7.2	<7.5	<10.3	<10.5	<13.7	<14.2	<17.0	<17.5	20	dB
Uniformity (Max)		<0.7	<1.0	<1.0	<1.2	<1.5	<2.0	<2.0	<2.5	<2.5	dB
Polarization Dependent Loss (Max)		<0.3	<0.3	<0.3	<0.3	<0.3	<0.4	<0.3	<0.4	<0.3	dB
Directivity (Min)		55									dB
Return Loss (Min)		55									dB
Optical Input Power		300									mW
Operating Temperature		-40 to +85 for bare fiber type 0 to +75 for loose tube type									°C
Storage Temperature		-40 to +85									°C
Fiber Type		Corning SMF-28 or equivalent									

Notes:

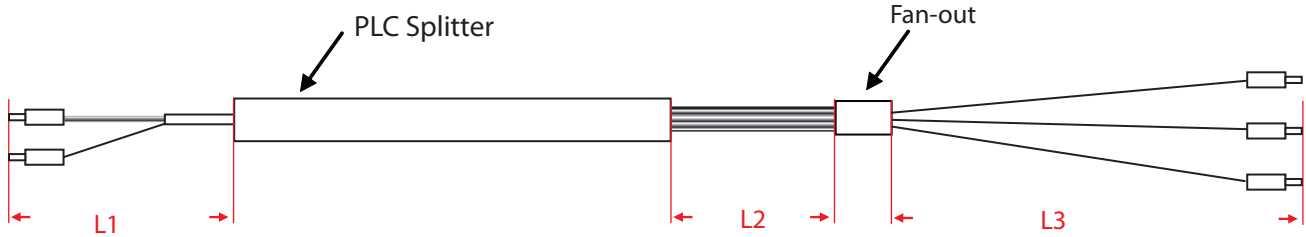
[1] All the parameters are tested at 1310nm&1550nm and room temperature.

[2] All the parameters are without connectors.

[3] Connector IL is 0.2dB/pair for PC&SPC type and 0.4dB/pair for APC type.

[4] For the PLC splitters with connectors, the final RL specification is >=45dB for PC&SPC type and >=50dB for APC type.

**Mechanical Drawing / Package Dimensions (dimension in mm)**



**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.

Grade	Type	L1 Fiber Length*	L2 Fiber Length*	L3 Fiber Length*	Connector Type
S Grade= S	1x4= 0	1.0meter= 1	1.0meter= 1	None= 0	None= 0
P Grade= P	1x8= 1	1.5meter= 5	1.5meter= 5	1.0meter= 1	FC/PC= 1
	1x16= 2	2.0meter= 2	2.0meter= 2	1.5meter= 5	FC/SPC= 2
	1x32= 3			2.0meter= 2	FC/APC= 3
	1x64= 4	<b>L1 Fiber Jacket</b>	<b>L2 Fiber Jacket</b>	<b>L3 Fiber Jacket</b>	SC/PC= 4
	2x4= 5	250µm bare fiber=1	Ribbon fiber= 3	None= 0	SC/SPC= 5
	2x8= 6	900µm loose tube= 2		250µm bare fiber= 1	SC/APC= 6
	2x16= 7			900µm loose tube= 2	ST= 7
	2x32= 8				LC/PC= 8
					MU/PC= 9
				<b>Fan-out Type</b>	
				without fan-out= 0 **	
				with fan-out= 1	

\* The tolerance of fiber length is +/-0.1m.

\*\* For without Fan-out option, please choose "00010" for last 5 digit as part number for [Fan-out Type] [L3 Fiber Jacket] [L3 Fiber Length] and [Connector Type] options.