

## Planar Lightwave Circuit Splitter Bare Fiber PLC

### Description

Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity, and is widely used in PON networks to realize optical signal power splitting. Gigalight provides whole series of 1xN and 2xN splitter products that are tailored for specific applications. All products meet GR-1209-CORE-2001 and GR-1221-CORE-1999 requirements.

### Features

- ◆ Low Insertion loss
- ◆ Low PDL
- ◆ Compact Design
- ◆ Good channel-to-channel uniformity
- ◆ Wide Operating Wavelength:  
From 1260nm to 1650nm
- ◆ Wide Operating Temperature:  
From -40°C to 85°C
- ◆ High Reliability and Stability

### Applications

- ◆ FTTX Systems
- ◆ PON Networks
- ◆ CATV Links
- ◆ Optical Signal Distribution

### Compliance

- ◆ Telcordia GR-1209-CORE-2001
- ◆ Telcordia GR-1221-CORE-1999
- ◆ RoHS



## Specifications

### PLC Splitter 1×N, 2XN PLC Splitter

Parameters	1×2	2×2	1×4	2×4	1×8	2×8	1×16	2×16	1×32	2×32	1×64	2×64
Operating Wavelength (nm)	1260~1650											
Fiber Type	G657A or customer specified											
Insertion Loss (dB) (P/S Grade)	3.8/ 4.0	4.0/ 4.2	7.1/ 7.3	7.6/ 7.6	10.2/ 10.5	11.0/ 11.2	13.5/ 13.7	14.4/ 14.6	16.5/ 16.9	17.5/ 17.9	20.5/ 21.0	21.0/ 21.5
Loss Uniformity (dB)	0.4	0.6	0.6	1.0	0.8	1.2	1.2	1.5	1.5	2.0	2.0	2.2
Return Loss (dB) (P/S Grade)	55/50											
Polarization Dependent Loss (dB)	0.2	0.2	0.2	0.2	0.2	0.3	0.25	0.3	0.3	0.4	0.35	0.4
Directivity (dB)	55											
Wavelength Dependent Loss (dB)	0.3	0.3	0.3	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Temperature Stability (-40~85 °C) (dB)	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Operating Temperature (°C)	-40~85											
Storage Temperature (°C)	-40~85											
Device Dimension (mm) (L×W×H)	40×4×4		40×4 ×4	50×4 ×4	40×4 ×4	50×4×4		50×7×4		60×7 ×4	60×12×4	

Notes:

- Specified without connectors.
- Add an additional 0.15dB loss per connector.

## Ordering information

GPS-	-	XXX	-	X	XX	-	X	XX	-	X	X
		Port Configuration		Input fiber type	Input fiber length		Output fiber type	Output fiber length		Input connector	Output connector
G=Gigalight		102=1X2		B=250μm bare fiber	10=1.0m		B=250μm bare fiber	10=1.0m		0=None	0=None
P=PLC		104=1X4		L=900μm loose tube	15=1.5m		R=ribbon fiber	15=1.5m		1=FC/UPC	1=FC/UPC
S=Splitter		108=1X8		T=900μm tight buffer	20=2.0m		F=Fant out box with 900μm loose tube	20=2.0m		2=FC/APC	2=FC/APC
		.....			.....			.....		3=SC/UPC	3=SC/UPC
		164=1X64								4=SC/APC	4=SC/APC
		202=2X2								5=LC/UPC	5=LC/UPC
		.....								6=LC/APC	6=LC/APC
		232=2X32								X=Customized	X=Customized