# **2xN Single Mode PLC Splitter**

# DATASHEET

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**Features** 

- Wide Wavelength
- Ultra Low Excess Loss
- Low PDL
- Highly Stable & Reliable
- High Uniformity
- Low Cost
- Telcordia Qualified

# **Applications**

- Telecommunications
- FTTX
- CATV
- LAN
- Passive Optical Network (PON)

A planar lightwave circuit (PLC) splitter is an optical power management device fabricated
using silica optical waveguide technology to distribute optical signals from the Central Office
(CO) to multiple premise locations. Bare fiber splitter is a kind of ODN product suitable for
PON networks that can be installed in the pigtail cassette, test instrument, and WDM
system, which minimizes space occupation.

### **Specifications**

Parameter		Min	Typical	Max	Unit		
Wavelength	1260		1650	nm			
	2x2		4.3		dB		
	2x4		7.6				
Insertion Loss <sup>[1], [2]</sup>	2x8		11.2				
Insertion Loss * ***	2x16		14.5				
	2x32		18.2				
	2x64		21				
	2x2		0.8				
	2x4		1.0				
114:50.000:00	2x8		1.5		-ID		
Uniformity	2x16		2.0		dB		
	2x32		2.5				
	2x64		3.0				
	2x2		0.2				
	2x4		0.3				
PDL	2x8		0.3				
PDL	2x16	0.4			dB		
	2x32		0.4				
	2x64		0.3				
Return Loss			50		dB		
Directivity			55		dB		
Power Handling			300		mW		
Working Temperature	-40		85	°C			
Storage Temperature	-40		85	°C			
Fiber type	Corning SMF28						
Connector Type	Custom specified						

Notes:

[1]. Measured without connectors at room temperature

[2]. For devices with connectors, ass 0.3dB to the IL

**Note:** The specifications provided are for general applications with a cost-effective approach. If you need to narrow or expand the tolerance, coverage, limit, or qualifications, please [click this <u>link</u>]:

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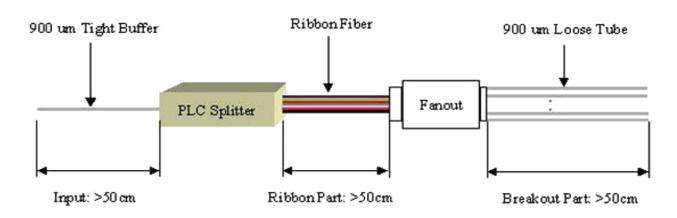
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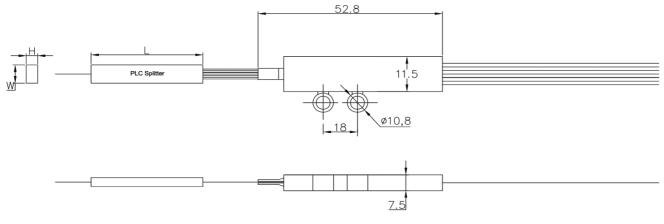


# Mechanical Dimensions (mm) Standard Package PLC Splitter H+/0 fmm

## With Fanout



Fanout



\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

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# **Ordering Information**

	Α							
Prefix		Wavelength	Port	Package	Fiber Type	Fiber Length	Input Connector	Output Connector
PLC2-		1310 = 1 1550 = 2 1310/1550 = 3 Special = 0	2x2 = 02 2x4 = 04 2x8 = 08 2x16 = 16 2x32 = 32 2x64 = 64	Standard = 1 Fanout = 2 Special = 0	250um = 1 Ribbon = 2 900um tube = 3 3mm Cable = 4 Special = 0	0.25m = 1 0.5 m = 2 1.0 m = 3 1.5 m = 4 2.0 m = 5 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 LC/APC = A LC/UPC = U Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC/PC = 7 LC/APC = A LC/UPC = U Special = 0

### **Fiber Core Alignment**

Note that the minimum attenuation for these devices depends on excellent core-to-core alignment when the connectors are mated. This is crucial for shorter wavelengths with smaller fiber core diameters that can increase the loss of many decibels above the specification if they are not perfectly aligned. Different vendors' connectors may not mate well with each other, especially for angled APC.

### **Fiber Cleanliness**

Fibers with smaller core diameters (<5 µm) must be kept extremely clean, contamination at fiber-fiber interfaces, combined with the high optical power density, can lead to significant optical damage. This type of damage usually requires re-polishing or replacement of the connector.

### **Maximum Optical Input Power**

Due to their small fiber core diameters for short wavelength and high photon energies, the damage thresholds for device is substantially reduced than the common 1550nm fiber. To avoid damage to the exposed fiber end faces and internal components, the optical input power should never exceed 20 mW for wavelengths shorter 650nm. We produce a special version to increase the how handling by expanding the core side at the fiber ends.

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