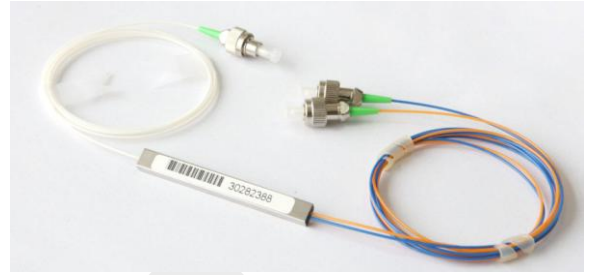


Planar Lightwave Circuit Splitter

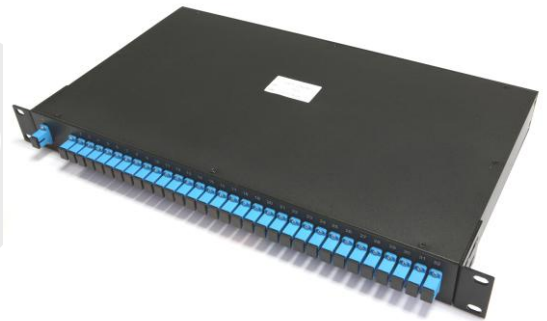
Features:

- ◆ 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
- ◆ Telcordia GR-1221-CORE
- ◆ RoHS

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.

OSM provides whole series of 1xN and 2xN splitter products that are tailored for specific applications. All products meet GR-1209-CORE and GR-1221-CORE requirements.

Performance Specifications:

1xN PLC Splitter:

Parameters	1x2	1x4	1x8	1x16	1x32	1x64	1x128
Operating Wavelength (nm)	1260~1650						
Fiber Type	G657A1 or customer specified						
Insertion Loss (dB)(P/S Grade)	3.8/4.0	7.1/7.3	10.2/10.5	13.5/13.7	16.5/16.9	20.5/21.0	23.8/24.2
Loss Uniformity(dB)	0.4	0.6	0.8	1.2	1.5	2.0	2.5
Polarization Dependent Loss(dB)	0.2	0.2	0.2	0.25	0.3	0.35	0.4
Return Loss (dB) (P/S Grade)	55/50	55/50	55/50	55/50	55/50	55/50	55/50
Directivity (dB)	55	55	55	55	55	55	55
Wavelength Dependent Loss (dB)	0.3	0.3	0.3	0.5	0.5	0.5	0.5
Temperature Stability (-40~85 °C)(dB)	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Operating Temperature (°C)	-40~85						
Storage Temperature (°C)	-40~85						
Device Dimension (mm)	40x4x4	40x4x4	40x4x4	50x4x4	50x7x4	60x12x4	N/A
Module Dimension (mm)	100x80x10	100x80x10	100x80x10	120x80x18	140x115x18	140x115x18	140x115x18
Mini-Module Dimension (mm)	50x7x4	50x7x4	50x7x4	60x12x4	80x20x6	100x40x6	N/A

2xN PLC Splitter:

Parameters	2x2	2x4	2x8	2x16	2x32	2x64	2x128
Operating Wavelength (nm)	1260~1650						
Fiber Type	G657A1 or customer specified						
Insertion Loss (dB) P/S Grade)	4.0	7.6	11.0	14.4	17.5	21.0	24.5
Loss Uniformity(dB)	0.6	1.0	1.2	1.5	1.8	2.2	2.5
Polarization Dependent Loss(dB)	0.2	0.2	0.3	0.3	0.35	0.4	0.4
Return Loss (dB) P/S Grade)	55/50	55/50	55/50	55/50	55/50	55/50	55/50
Directivity (dB)	55	55	55	55	55	55	55
Wavelength Dependent Loss (dB)	0.3	0.4	0.5	0.5	0.5	0.5	0.5
Temperature Stability (-40~85 °C)(dB)	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Operating Temperature (°C)	-40~85						
Storage Temperature (°C)	-40~85						
Device Dimension (mm)	40x4x4	50x4x4	50x4x4	50x7x4	60x7x4	N/A	N/A
Module Dimension (mm)	100x80x10	100x80x10	100x80x10	120x80x18	140x115x18	140x115x18	140x115x18
Mini-Module Dimension (mm)	60x7x4	60x7x4	60x7x4	60x12x4	80x20x6	N/A	N/A

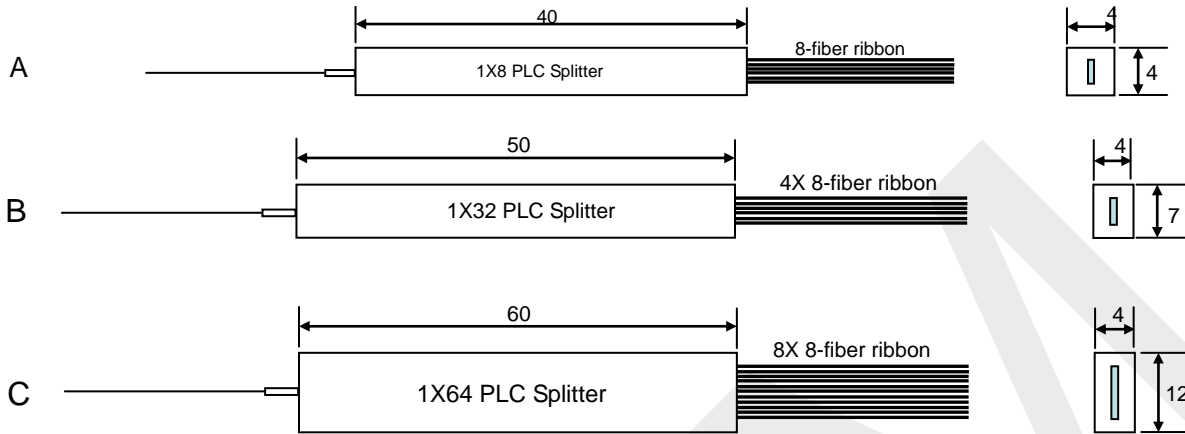
Notes:

Specified without connectors.

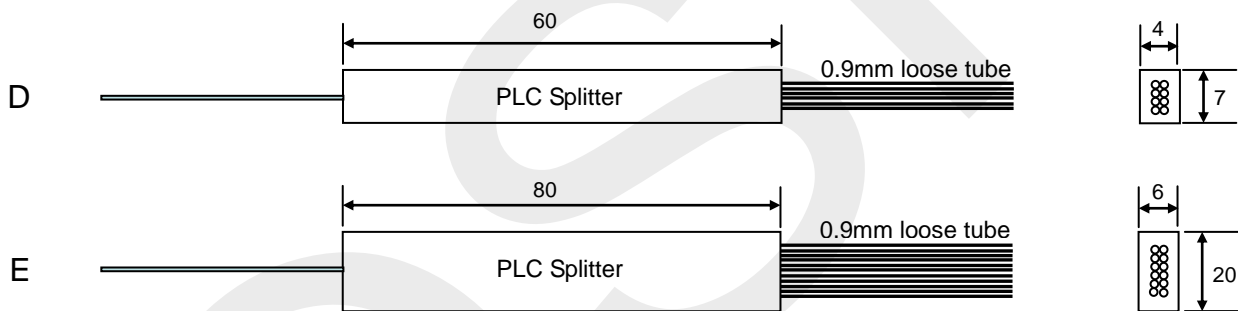
Add an additional 0.15dB loss per connector.

Mechanical Dimensions:

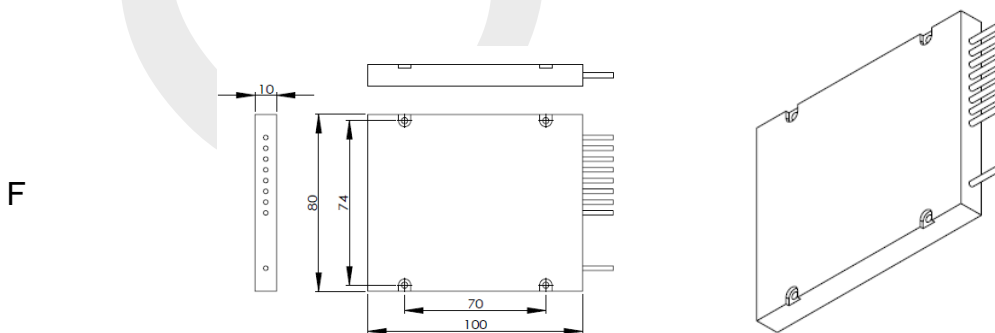
PLC Splitter packed in stainless steel tube



PLC Splitter Mini-Module

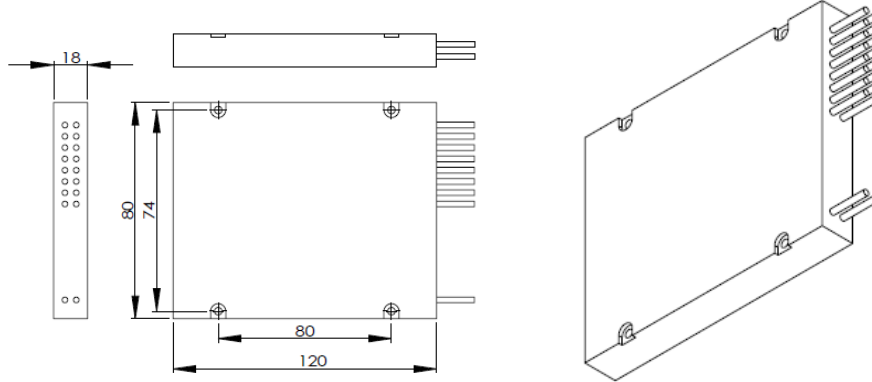


PLC Splitter Module



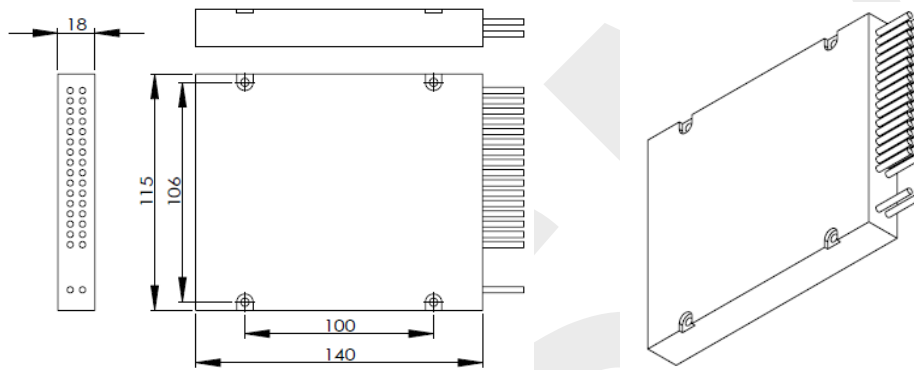
100X80X10

G



120X80X18

H



140X115X18

Nomenclature:

PLC	XXXX	X	X	X	X	X	X
	Port	Input Pigtail Style	Input Connector	Output Pigtail Style	Fiber Length	Output Connector	Package type
PLC	0102=1x2	0=bare fiber 1=900um Loose tube 2=900um Jacket 3=2.0mm cable 4=3.0mm cable	0=none 1=SC/PC 2=SC/APC 3=FC/PC 4=FC/APC 5=ST 6=LC 7=LC/APC 8=E2000 S=Special	0=bare fiber 1=900um Loose tube 2=900um Jacket 3=2.0mmcable 4=3.0mmcable	0=0.5m 1=1m 2=1.5m 3=2m 4=3m 5=4m S=special	0=none 1=SC/PC 2=SC/APC 3=FC/PC 4=FC/APC 5=ST/PC 6=LC/PC 7=LC/APC 8=E2000 S=Special	A=4X4X40 B=4X7X50 C=4X12X60 D=4X7X60 E=6X20X80 F=100X80X10 G=120X80X18 H=140X115X18 I=19"1U Rack S=Special
	0104=1x4						
	0108=1x8						
	0116=1x16						
	0132=1x32						
	0164=1x64						
	1128=1x128						
	0204=2x4						
	0208=2x8						
	0216=2x16						
	0232=2x32						
	0264=2x64						
	2128=2x128						