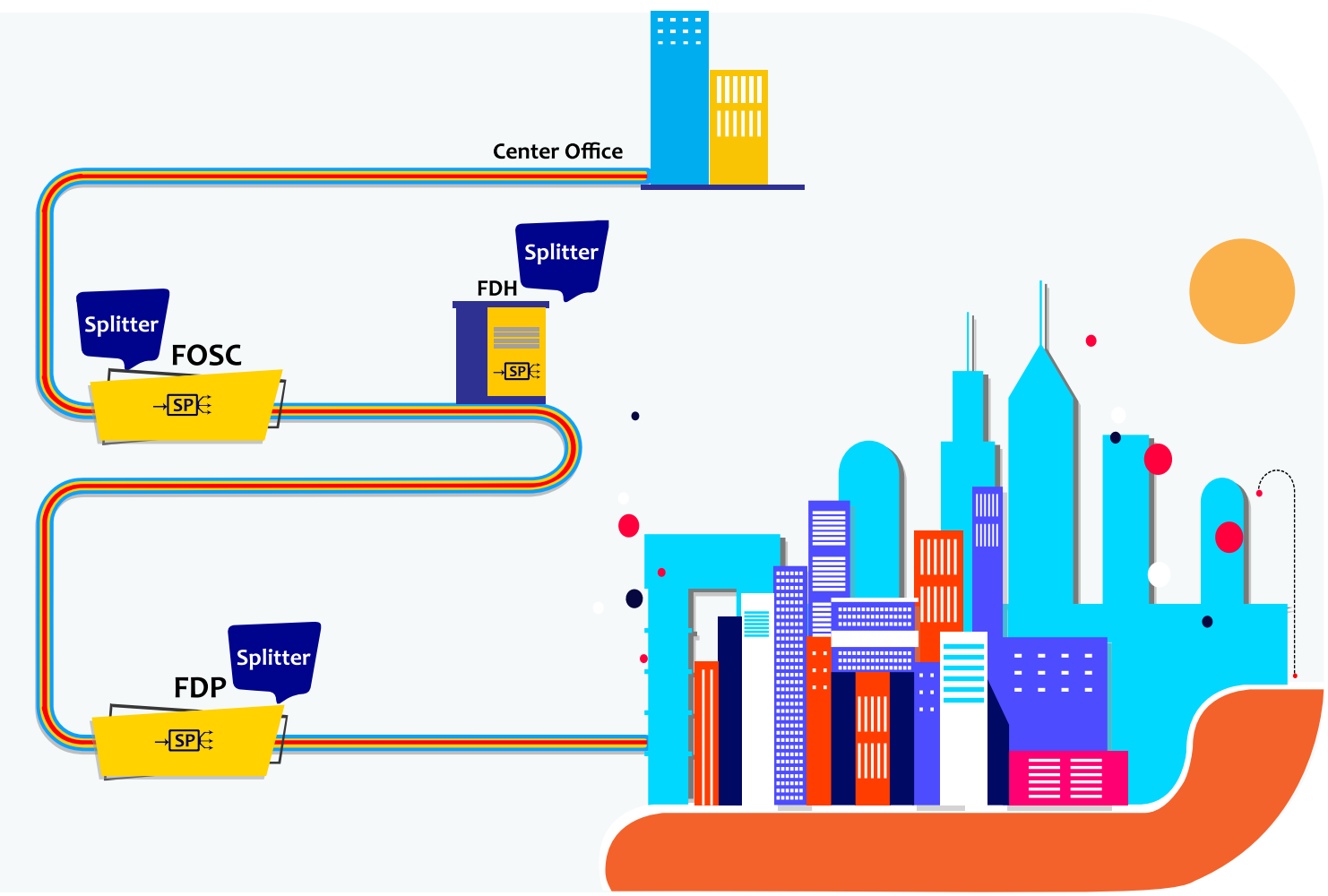
PLC Optical Splitter

RayaFiber

Planar Lightwave Circuit (PLC) splitter is a key component in FTTx network and is responsible for distribution and converging of the optical power in ODN network by dividing an optical signal from one or two input fiber ports to multiple output ports. It features low insertion loss, low polarization dependent loss, high reliability, good channel to channel uniformity and wide operating wavelength range from 1260nm to 1650nm.

Compact size of the splitters and variety of configurations make them usable in underground, aerial, pedestal and rack mount systems.

All Products are fully complied with Telcordia GR-1209 and GR-1221 standards.



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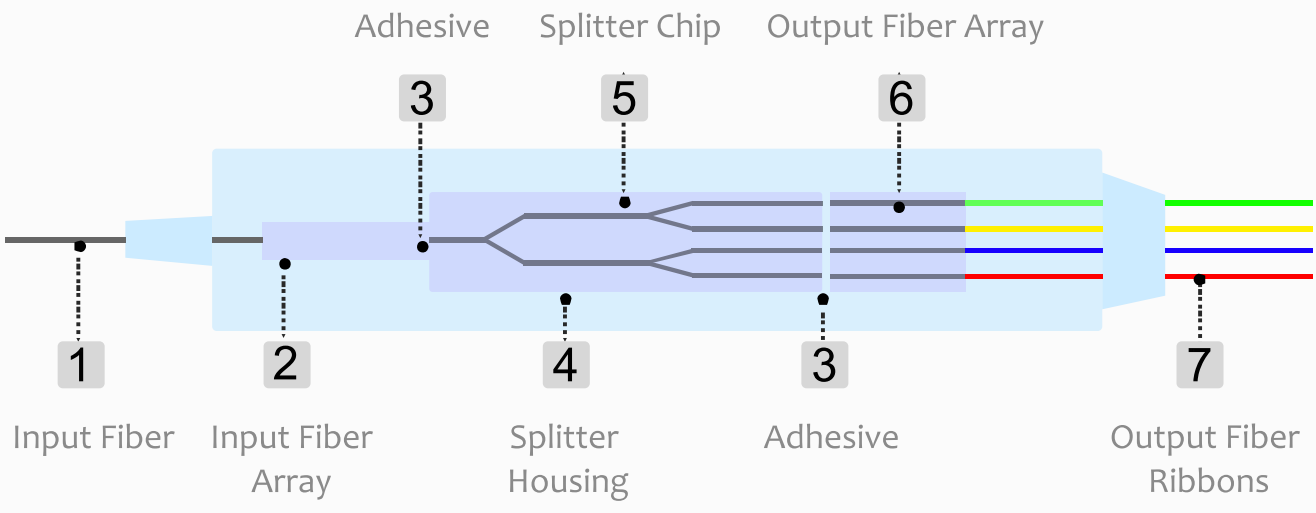
Features

- Low insertion loss
- Low PDL
- Compact Design
- Good channel-to-channel uniformity
- Wide Operating Wavelength: from 1260nm to 1650nm
- Wide Operating Temperature: From -40℃ to 85℃
- High Reliability and Stability
- Can be used with different type of connectors such as SC, LC, FC, DIN
- G.657A/ G652D SM fiber input/output
- Packaged in Micro or Cassette type
- Variety of configurations from 1:2 to 1:64 and 2:2 to 2:64
- Compatible with Telcordia GR-1209, GR-1221 and RoHS



Optical Properties

Parameters	Specification	
Operation wavelength		1260 ~ 1650 nm
Maximum input power		>300mW
Directivity		>55dB
WDL	1x2 to 1x16, 2x2 to 2x16 <0.5dB	1x32 to 1x64, 2x32 to 2x64 <0.8dB
PDL	1x2 to 1x16, 2x2 to 2x16 <0.3dB	1x32 to 1x64 ，2x32 to 2x64 <0.4dB
Min Return loss		55dB

Insertion Loss and Uniformity

1x N split ratio						
Split ratio	1x2	1x4	1x8	1x16	1x32	1x64
Max insertion Loss (dB)	4	7.3	10.4	13.6	16.8	20.3
Max uniformity (dB)	0.4	0.7	1	1.3	1.5	1.9
2x N split ratio						
Split ratio	2x2	2x4	2x8	2x16	2x32	2x64
Max insertion loss (dB)	4.2	7.8	11.2	14	17.9	21.4
Max uniformity (dB)	0.6	1	1.2	1.5	1.8	2

[1] 0.3 dB should be added to insertion loss for connectors.

Temperature and Humidity

Parameters	Specification
Operation temp °C	-40 to +85
Transport and storage °C	-40 to +85
Storage Relative humidity	≤95%

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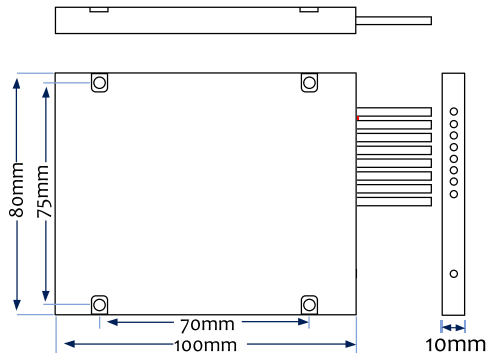
Cassette Type Splitter

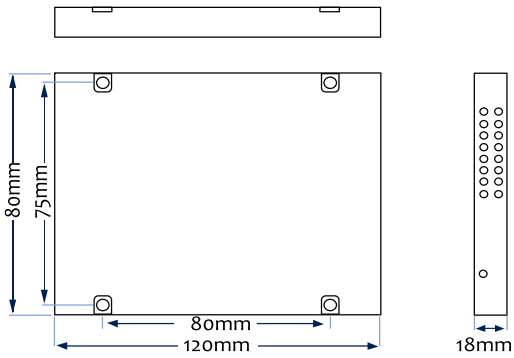
- ⌀ 2.0 mm pigtail with or without SC, LC or FC connector
- Adopts G.657A/ G652D optical fiber
- Small package size
- Provides split ratio from 1x2 to 1x64, and 2x2 to 2x64

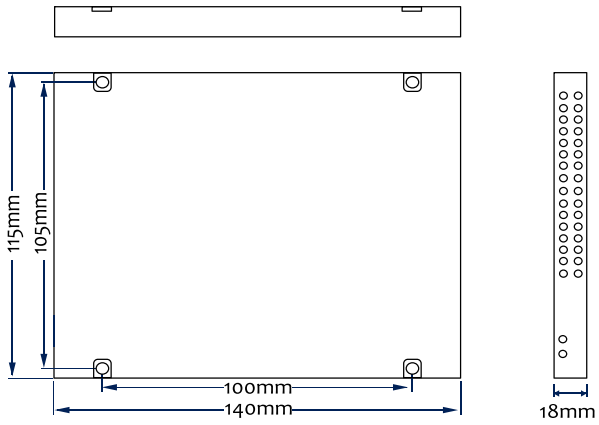
Dimension

Split ratio [2]	NxM1	NxM2	Nx64
Dimension (mm)	100x80x10	120x80x18	140x115x18
Package material	ABS		
Port description	Ø2.0 mm pigtail, with or without SC, LC , or FC connector		

[2] N=1, 2; M1=2, 4, 8; M2=16, 32



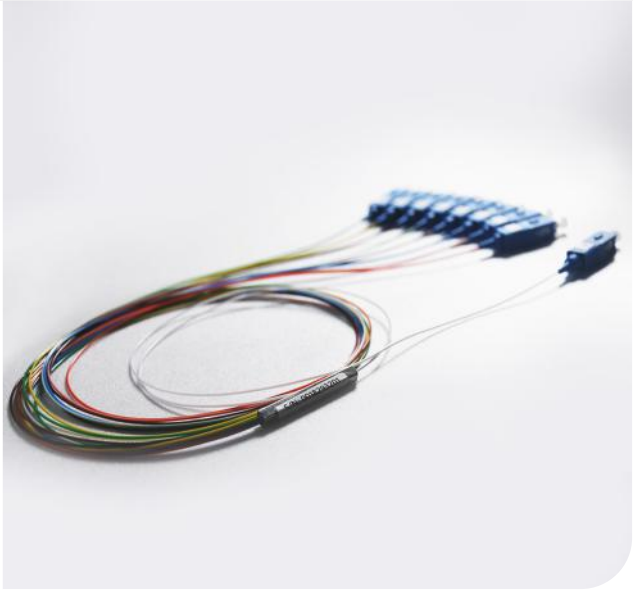




PLC Optical Splitter

Micro Type Splitter

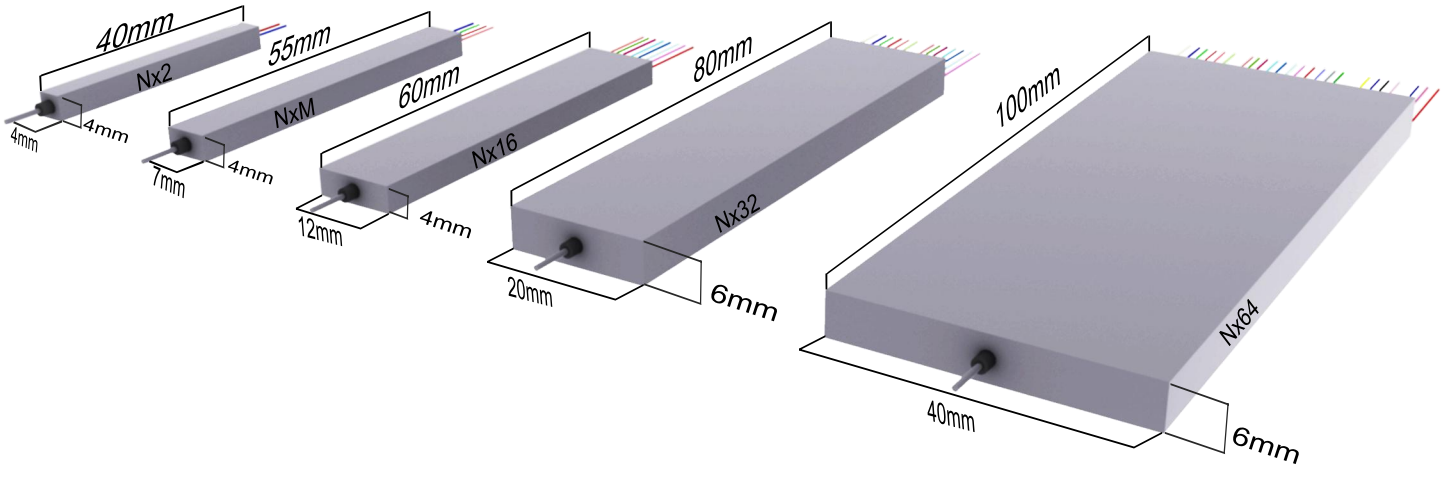
- ⌀ 0.9 mm loose tube pigtail with or without SC, LC or FC connector
- Adopts G.657A/ G652D optical fiber
- Micro encapsulation
- Provides split ratio from 1x2 to 1x64, and 2x2 to 2x64



Dimension

Split ratio [3]	Nx2	NxM	Nx16	Nx32	Nx64
Dimension (mm)	40x4x4	55x7x4	60x12x4	80x20x6	100x40x6
Package material	Stainless steel				
Port description	Ø0.9mm pigtail, with or without SC, LC , or FC connector				

[3] N=1, 2; M=4, 8



Ordering Information

PLC XXX – X – XX – XX – XXX – XX – XX – XXX

1 2 3 4 5 6 7 8

1 Splitter ratio

102=1x2
...
164=1x64
202=2x2
...
264=2x64

2 Package

C = Cassette Type
M = Micro Type

3 Input Fiber Length

07 = 0.7m
10 = 1.0m
12 = 1.2m

4 Input Fiber Type

09 = 0.9mm loose tube
20 = 2.0mm loose tube
30 = 3.0mm loose tube

5 Input Connector Type

FCP = FC/PC
FCA = FC/APC
SCP = SC/PC
SCA = SC/APC
LCP = LC/PC
LCA = LC/APC
Blank = No Connector

6 Output Fiber Length

07 = 0.7m
10 = 1.0m
12 = 1.2m

7 Output Fiber Type

09 = 0.9mm loose tube
20 = 2.0mm loose tube
30 = 3.0mm loose tube

8 Output Connector Type

FCP = FC/PC
FCA = FC/APC
SCP = SC/PC
SCA = SC/APC
LCP = LC/PC
LCA = LC/APC
Blank = No Connector

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