

# SPLITTER PLC STEEL BOX

Part Number: SPL-1Xx-PLC

## Description

Planar waveguide light optical distributor (PLC Splitter), is a kind of planar waveguide integrated optical device, it can be 1260nm ~ 1650nm such a wide range of wavelengths of light power reservation in realization, the distribution of wavelength range covers EPON technology used 1310nm, 1490nm and 1550nm three wavelengths. Especially suitable for EPON Ethernet passive optical network access technology FTTP fiber network system, broadband passive optical distributor (POS) use.



## Key Features

- Low Insertion loss and Low PDL
- Uniform power splitting
- High reliability
- Excellent environmental stability
- Compact size and various package

## Applications

- FTTx Systems
- Digital, hybrid and AM-Video systems
- LAN,WAN and Metro Networks
- CATV systems
- Other applications in fiber optic systems

## Product Specifications

### Specifications and Models

1xN PLC Splitter (Measured at room temperature and excludes connector loss)

Type		1x2	1x4	1x8	1x16	1x32	1x64
Fiber Type		Singlemode G657A1					
Operating Wavelength		1260nm~1650nm					
Insertion Loss(dB)	Typical	3.8	7.2	10.2	13.5	16.5	20.5
	Maximum	4.0	7.4	10.5	13.9	17	20.8
Loss Uniformity(dB)		≤0.5	≤0.6	≤0.8	1.0	1.5	20
Polariation Dependent Loss(dB)		0.2	0.2	0.3	0.3	0.3	0.4
Directivity(dB) MINI		55					

Return Loss(dB) MINI	UPC ≥ 50, APC ≥ 60
OperatingTemperature(°C)	-20 to +75
Storage Temperature(°C)	-40 to +85
Input and Out Fiber Length	1.1M ± 0.05M
Input/output cable diameter	0.25mm or 0.9mm or 2.0mm or 3.0mm
Input/output cable Jacket	PVC or LSZH
Packing way	Stainless tube or ABS box

The insertion loss(IL) value based on without connector, the IL value will increase if add the connector.

2xN PLC Splitter (Measured at room temperature and excludes connector loss)

Type		2x2	2x4	2x8	2x16	2x32	2x64
Fiber Type		Singlemode G657A1					
Operating Wavelength		1260nm~1650nm					
Insertion Loss(dB)	Typical	4.0	7.4	10.5	13.9	17.0	20.5
	Maximum	4.3	7.8	11.1	14.4	17.7	20.8
Loss Uniformity(dB)		≤0.5	≤0.6	≤0.8	1.0	1.5	20
Polarisation Dependent Loss(dB)		0.2	0.2	0.3	0.3	0.3	0.4
Directivity(dB) MINI		55					
Return Loss(dB) MINI		UPC ≥ 50, APC ≥ 60					
OperatingTemperature(°C)		-20 to +75					
Storage Temperature(°C)		-40 to +85					
Input and Out Fiber Length		1.1M ± 0.05M					
Input/output cable diameter		0.25mm or 0.9mm or 2.0mm or 3.0mm					
Input/output cable Jacket		PVC or LSZH					
Packing way		Stainless tube or ABS box					

The insertion loss(IL) value based on without connector, the IL value will increase if add the connector.

**Mechanical and environmental data**

Projects	Parameter
Operating temperature	-25°C ~ +40°C
Storage temperature	-25°C ~ +55°C
Relative humidity	≤85%(+30°C)
Air pressure	70Kpa ~ 106Kpa

Pictures & Drawing for reference

PLC – 1x8 splitter

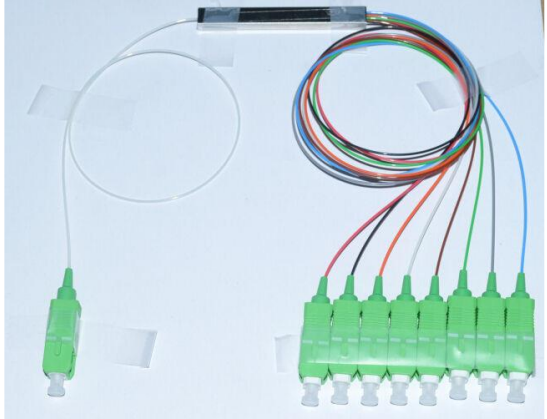
Technical drawing of a 1x8 PLC splitter. The drawing shows a single input SC connector (1) leading to a splitter (5) with a size of 4\*7\*60mm. From the splitter, eight output fibers (6) emerge, each with a different color (blue, orange, green, black, red, white, brown, grey). Each output fiber is terminated with an SC/APC SM simplex connector (2) and an SC/0.9mm boot (3). The drawing includes dimensions of 1000-1100mm for the cable length and a note with technical specifications.

NOTE:  
 1.Insertion loss :PLC(SC/APC)≤10.7dB λ: 1310&1550nm  
 Return loss :PLC(SC/APC)≥50 dB λ: 1310&1550nm  
 2.Uniformity ≤0.8dB  
 3.PDL ≤0.3dB  
 4.Durability:500 matings  
 5.Operation temperature:-40°C to +85°C  
 6.SC connector according to IEC 61754-4

ROHS Compliant

SCI/APC---1x8 PLC Splitter 1260~1650nm G657A1

ITEM	Description	QTY
1	SC dust cover green	9 PCS
2	SC/APC SM simplex connector green	9 PCS
3	SC/0.9mm boot green	9 PCS
4	OD=0.9mm tubing hytrel white	1 PC
5	1x8 PLC Splitter 1260~1650nm G657A1	1 PC
6	OD=0.9mm tubing hytrel 8 colors	1 PC



PLC – 1x16 splitter

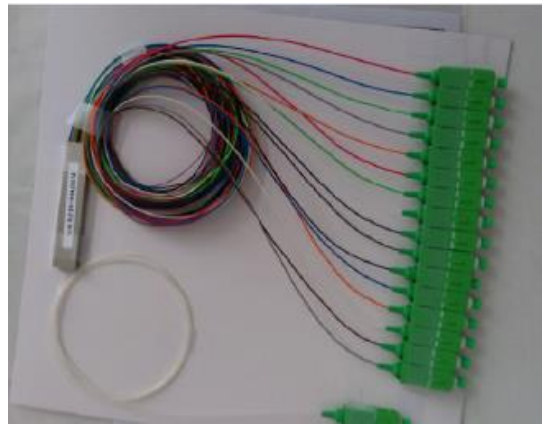
Technical drawing of a 1x16 PLC splitter. The drawing shows a single input SC connector (1) leading to a splitter (5) with a size of 4\*12\*60mm. From the splitter, sixteen output fibers (6) emerge, each with a different color. Each output fiber is terminated with an SC/APC SM simplex connector (2) and an SC/0.9mm boot (3). The drawing includes dimensions of 1000-1100mm for the cable length and a note with technical specifications.

NOTE:  
 1.Insertion loss :PLC(SC/APC)≤13.9dB λ: 1310&1550nm  
 Return loss :PLC(SC/APC)≥50 dB λ: 1310&1550nm  
 2.Uniformity ≤1.0dB  
 3.PDL ≤0.3dB  
 4.Durability:500 matings  
 5.Operation temperature:-40°C to +85°C  
 6.SC connector according to IEC 61754-4

ROHS Compliant

SCI/APC---1x16 PLC Splitter 1260~1650nm G657A1

ITEM	Description	QTY
1	SC dust cover green	17 PCS
2	SC/APC SM simplex connector green	17 PCS
3	SC/0.9mm boot green	17 PCS
4	OD=0.9mm tubing hytrel white	17 PCS
5	1x16 PLC Splitter 1260~1650nm G657A1	1 PC



### PLC – 2x8 splitter

NOTE:

- 1 Insertion loss :PLC(SC/APC) $\leq 10.7$ dB  $\lambda$ : 1310&1550nm
- 2 Return loss :PLC(SC/APC) $\geq 50$  dB  $\lambda$ : 1310&1550nm
- 3 Uniformity  $\leq 0.9$ dB
- 4 PDL  $\leq 0.4$ dB
- 5 Durability: 500 matings
- 6 Operation temperature: -40°C to +85°C
- 7 SC connector according to IEC 61754-4

ROHS Compliant

SC/APC--2x8 PLC Splitter 1260-1650nm G657A1		
ITEM	Description	QTY
1	SC dust cover green	10 PCS
2	SC/APC SM simplex connector green	10 PCS
3	SC/0.9mm boot green	10 PCS
4	OD=0.9mm tubing hytel 2 colors	1 PC
5	2x8 PLC Splitter 1260-1650nm G657A1	1 PC
6	OD=0.9mm tubing hytel 8 colors	1 PC



### PLC – 2x16 splitter

NOTE:

- 1 Insertion loss :PLC(SC/APC) $\leq 13.9$ dB  $\lambda$ : 1310&1550nm
- 2 Return loss :PLC(SC/APC) $\geq 50$  dB  $\lambda$ : 1310&1550nm
- 3 Uniformity  $\leq 1.0$ dB
- 4 PDL  $\leq 0.4$ dB
- 5 Durability: 500 matings
- 6 Operation temperature: -40°C to +85°C
- 7 SC connector according to IEC 61754-4

ROHS Compliant

SC/APC--2x16 PLC Splitter 1260-1650nm G657A1		
ITEM	Description	QTY
1	SC dust cover green	18 PCS
2	SC/APC SM simplex connector green	18 PCS
3	SC/0.9mm boot green	18 PCS
4	OD=0.9mm tubing hytel 2 colors	1 PC
5	2x16 PLC Splitter 1260-1650nm G657A1	1 PC
6	OD=0.9mm tubing hytel 8 colors	2 PCS

