



## 1. General Description

The PLC Splitters is branching devices that is used to distribute optical signals to multiple locations for processing. In optical networks, it is often necessary to split an optical signal into many identical signals, or to combine many signals into a single signal. Planar light wave circuit (PLC) splitter is an optical power distribution device based on the integrated waveguide of quartz plate. With the features of small size, wide range of operating wavelength, stable reliability and good uniformity, It's widely used in PON,ODN,FTTX point to connect between termination device and central office to achieve the signal splitter.

Planet provides ABS Cassette PLC Splitter family has 1x2, 1x4, 1x8, 1x16, 1x32, 1x64, 2x2, 2x4, 2x8, 2x16, 2x32, 2 x 64 PLC splitter with specifications that are tailored for different applications and markets. Wide bandwidth, compact size. All products meets, ROHS, GR-1209-CORE-2001 and GR-1221-CORE-1999.

## 2. Features

- Low Insertion loss
- Low Polarization Dependent Loss.
- Single Fusion design
- Compact size
- Uniform power splitting
- 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
- Excellent Environmental Stability.
- Excellent Mechanical Stability.
- Telcordia GR-1221 and GR-1209.

## 3. Application

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

## 4. Optical Specifications

Splitter Type	ABS Box						
Fiber length	1.5m						
Connector Type	SC APC						
Optical Fiber Type	Corning SMF-28e fiber, G657A1						
Fiber type	G657A1						
Operation Wavelength	1260~1650 nm						
Cable type	900um						
Directivity (dB) Min *	55						
Return Loss (dB) Min *	55 (50)						
Power Handling(mW)	300						
Parameter	Unit	Specification (P Grade)					
<b>Channel Number</b>		<b>1X2</b>	<b>1X4</b>	<b>1X8</b>	<b>1X16</b>	<b>1X32</b>	<b>1X64</b>
Insertion Loss with Connector (Max)	dB	4.1/4.4	7.4/7.9	10.5/11.0	13.8/14.1	17.1/17.4	20.4/21.0
Insertion Loss without Connector (Max)	dB	3.8/4.1	7.1/7.6	10.2/10.7	13.5/13.8	16.8/17.1	20.1/20.7
Uniformity (Max.)	dB	0.6	0.7	0.8	1.0	1.5	2.0
Polarization Dependent Loss	dB	0.2	0.2	0.2	0.3	0.3	0.3
<b>Channel Number</b>		<b>2X2</b>	<b>2X4</b>	<b>2X8</b>	<b>2X16</b>	<b>2X32</b>	<b>2X64</b>
Insertion Loss with Connector (Max)	dB	4.4/4.6	7.7/8.1	10.8/11.3	14.1/14.4	17.4/17.7	20.6/21.3
Insertion Loss without Connector (Max)	dB	4.1/4.3	7.4/7.8	10.5/11	13.8/14.1	17.1/17.4	20.3/21.0
Uniformity (Max.)	dB	0.6	0.7	0.8	1.0	1.5	2.0
Polarization Dependent Loss	dB	0.2	0.2	0.2	0.3	0.3	0.5
Return Loss	dB	≥45 (PC) ; 50 (UPC) ; 60 (APC)					

## 5. Environmental Conditions

Operating Temperature	°C	-40~+85
Storage Temperature	°C	-40~+85
Operating Humidity	%RH	≤93
Storage Humidity	%RH	≤93

**6. Dimension (mm)**

Splitter	1X2	1X4	1X8	1X16	1X32	1X64
Cassette size	100×80×10	100×80×10	100×80×10	120×80×18	120×80×18	140×114×18
Splitter	2X2	2X4	2X8	2X16	2X32	2X64
Cassette size	100×80×10	100×80×10	100×80×10	120×80×18	120×80×18	140×114×18

**7. Standards**

ISO9001  
RoHS, CE

**8. Ordering information**

**APC TYPE:**

PL-FSPSCSA21	PLC Splitter 1: 2 ABS Box Type With1.5m SC APC Pigtails
PL-FSPSCSA41	PLC Splitter 1: 4 ABS Box Type With1.5m SC APC Pigtails
PL-FSPSCSA81	PLC Splitter 1: 8 ABS Box Type With1.5m SC APC Pigtails
PL-FSPSCSA161	PLC Splitter 1: 16 ABS Box Type With1.5m SC APC Pigtails
PL-FSPSCSA321	PLC Splitter 1: 32 ABS Box Type With1.5m SC APC Pigtails
PL-FSPSCSA641	PLC Splitter 1: 64 ABS Box Type With1.5m SC APC Pigtails

**UPC TYPE:**

PL-FSPSCSU21	PLC Splitter 1: 2 ABS Box Type With1.5m SC UPC Pigtails
PL-FSPSCSU41	PLC Splitter 1: 4 ABS Box Type With1.5m SC UPC Pigtails
PL-FSPSCSU81	PLC Splitter 1: 8 ABS Box Type With1.5m SC UPC Pigtails
PL-FSPSCSU161	PLC Splitter 1: 16 ABS Box Type With1.5m SC UPC Pigtails
PL-FSPSCSU321	PLC Splitter 1: 32 ABS Box Type With1.5m SC UPC Pigtails
PL-FSPSCSU641	PLC Splitter 1: 64 ABS Box Type With1.5m SC UPC Pigtails