

# Product Specification

## PLC Splitter Module Type , 1\*N Series.

### Product Feature:

- Low insertion loss
- High return loss
- Telcordia GR-1209 and GR-1221 compliance
- YD/T 2000.1-2009 compliance

### Application:

- FTTx
- PON networks
- CATV
- Data communication



### Product Selection

Input-Output-Tube Dia.-Length-Fiber Type-Color

Splitter Type	Input	Output	Tube Dia.(mm)	Length(m)	Fiber Type	Color
1*2	None	None	PVC 2.0	1	G657A1	Yellow
1*4	SC/PC	SC/PC	PVC 3.0	1.5	G657A2	
1*8	SC/APC	SC/APC		2		
1*16	FC/PC	FC/PC		3		
1*32	FC/APC	FC/APC		Customerized		
1*64	LC/PC	LC/PC				
	LC/APC	LC/APC				

## 1.0 PLC Splitter Module Type Specifications

### 1.1 Module Type structure chart

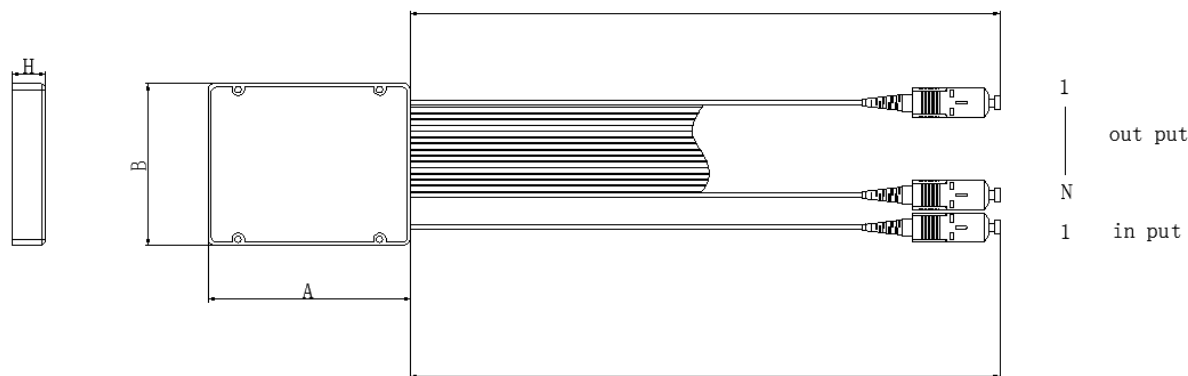


Figure 1

## 1.2 Module Type Box Size

Product Type	Diameter (mm)	Box Size (Lx Wx H) mm
1x2	2.0/3.0	100x80x10
1x4	2.0/3.0	100x80x10
1x8	2.0/3.0	100x80x10
1x16	2.0/3.0	120x80x18
1x32	2.0/3.0	120x80x18
1x64	2.0/3.0	120x80x18

Figure 2

## 1.3 Typical PLC Splitter Module Type Optical Parameters

Product Type	1x2	1x4	1x8	1x16	1x32	1x64
Fiber Type	G.657A					
Working Wave Length (nm)	1260nm~1650nm					
IL(dB)	≤3.9	≤7.2	≤10.3	≤13.6	≤16.9	≤20.2
Uni (dB)	≤0.8	≤0.8	≤0.8	≤1.0	≤1.5	≤2.0
PDL(dB)	≤0.2	≤0.3	≤0.3	≤0.3	≤0.3	≤0.5
WDL(dB)	≤0.8	≤0.8	≤0.8	≤1.0	≤1.0	≤1.0
RL(dB)	≥50 (UPC) , ≥55 (APC)					
Directivity (dB)	≥55	≥55	≥55	≥55	≥55	≥55

Note: 1, The above parameters are for PLC splitter without connectors, 0.2dB insertion loss will be added with connectors.

2, Return loss ≥55dB(UPC), ≥60dB(APC) is available.

Figure 3

## 1.4 Mechanical Test

No.	Test	Performance	Results
1	Drop Test	1.8m, 3 directions, 8 times/direction, 5 cycle times	1. IL variation ≤0.5dB 2. Appearance checking
2	Vibration Test	Frequency: 10~55HZ	
		Scan: 45 times/min	
		Amplitude: 0.75mm	
		Time: X, Y, Z direction/30 min	
3	Cable Torsion	Burden: Ø2.0mm Cable, 15N;	
	Test	Method: 22~28cm, ±180°, 10 times/Min, 25 times	
4	Cable Tension	Load: Ø2.0mm Cable, 50N;	
	Test	Method: 22~28cm.	

Figure 4

## 1.5 Reliability Test

No.	Test	Performance	Results
1	High temperature storage(dry)	85°C(±2°C), humidity < 40RH, 2000h	1. IL variation ≤0.5dB; 2. Appearance checking
2	Low temperature storage	-40°C (±5°C) , 2000h	
3	High temperature storage(humid-heat)	75°C (±2°C) , 90% (±5%) RH or	
		85°C (±2°C) 85% (±5%) 500h(COa), 2000h(UNCb)	
4	Temperature Cycle	-40°C~+85°C, 8h/Cycle, 500 cycles.	

Figure 5

1.6 Product and packing label

**1X8 PLC Splitter Module**

**P/N:** A 0 3 - 2 1 0 8 2 7  
**S/N:** 1 7 0 5 1 2 0 0 0 6 1  
**Date:** 2017-05-12

Figure 7

Product	1X8 PLC Splitter Module Type
Spec.	SC/APC, 2.0mm, 1.5m, G657A1
Value	IL≤10.5dB, RL≥55dB
Qty.	2Pcs

Figure 8, Size: 70x30mm

1.7 Packing detail(with connectors)

Product Type	Type	1X2	1X4	1X8	1X16	1X32	1X64
2.0mm/3.0mm ≤2m	Inner box size (cm)	27*22*3.5	27*22*3.5	27*22*3.5	27*22*3.5	27*22*3.5	32*28*4
		(2 pcs)	(2pcs)	(2pcs)	(1 pcs)	(1 pcs )	(1 pcs )
	Outer box size (cm)	64*39*43	64*39*43	64*39*43	64*39*43	64*39*43	64*39*43
		(100 pcs)	(100 pcs)	(100 pcs)	(50 pcs)	(50 pcs)	(15 pcs)

Figure 9

1.7-1 Product Packing: inner box carton



Figure 10