KINGTON

HONGKONG KINGTON OPTIC CO., LIMITED

Planar Lightwave Circuit Splitter (PLC)

We offers different types of high-quality splitters. These products are designed for long-term reliability, superior performance, and a wide range of usage in fiber optics including optical transmission, long haul, subscriber loop, fiber to the home, telecommunications, CATV, test equipment, optical fiber sensors, data communications and wide-area network.

Our optical splitters are designed for consistent performance, low optical Insertion loss, low polarization Dependent Loss, high reliability and stability , superior environmental and mechanical characteristics, and fast installation. They also enable more effective monitoring and management of fiber optical networks.

The products we offer are:
PLC Splitter:1x4, 1x8,1x16, 1x32, 1x64, and 2x4,2x8,2x16,2x32

Our PLC splitters are tested based on the strictest standards of the industry, and we guarantee quality, turnaround and competitive pricing.

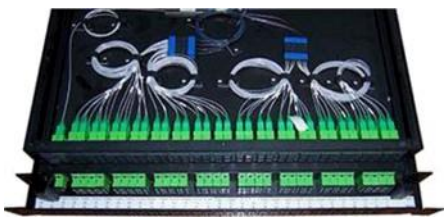
Figure and Drawing

1 Fanout Type PLC Splitter

2. Box Type PLC Splitter

3. Card-Type PLC Splitter

4. Rackmount Type PLC Splitter



Key Features

1. Low IL and PDL
2. High reliability
3. High channel counts
4. Wide wavelength range
S. Large operating temperature range
6. Excellent Environmental & Mechanical Stability

APPLICATIONS

1. FTTX (FTTP, FTTH, FTTN, FTTC)
2. Local Area Networks (LAN)
3. Test Equipment
4. CATV
5. Analog/Digital Passive Optical Networks (PON)

SPECIFICATION

- Standard connector type SC/APC-8^0, SC/UPC,
- Must have a cover to prevent dirt.
- Specifications for connectors:

+ Insertion loss: ≤ 0.30dB.
+ Reflection loss: 60dB for SC/APC-8^0 , 50dB for SC/UPC
+ Loss stability: ≤ 0.1dB after 500 connection cycles.
+ Working temperature: from -100C to +650C.
+ Humidity ≤95%RH.

Mechanical, environmental and connection requirements according to ITU-T L.36/2008:

- Vibration resistance - Vibration (IEC 61300-2-1): compliant with ITU-T L.36/2008 (clause 9.2.1)
- Strength of the coupling mechanism (IEC 61300-2-6): comply with ITU-T L.36/2008 (section 9.2.2).
- Fiber/cable retention (IEC 61300-2-4): compliant with ITU-T L.36/2008 (section 9.2.3.1).
- Change of temperature (IEC 61300-2-22): comply with ITU-T L.36/2008 (clause 9.2.6.4).
- Environmental tests (according to ITU-T L51/2012 Passive node elements for fiber optic networks – General principles and definitions for characterization and performance evaluation, Table A.1/L.51 – Summary of typical parameters for the basic environmental classes and ITU-T L.52/2003 Deployment of Passive Optical Networks (PON), Table I.3/L.52 – Environmental and mechanical performance):
- Vibration resistance test according to IEC 61300-2-1 (Requirement with technical test to demonstrate compliance).
- Test for resistance to temperature changes (Temperature cycling) according to IEC 61300-2-22, temperature range from -10oC to +65oC (Required with TLKT to demonstrate compliance).
- Immersion in water (water immersion): temperature 35°C ÷ 43°C; pH 5.5 for 5 days. Loss change <0.2dB (Requires technical evidence to demonstrate response).
- Salt spray: spray 5% NaCl water, then maintain the temperature at 43oC ÷ 65oC for 5 days. Loss change <0.2dB (Requires technical evidence to demonstrate response).
- Working environment and conditions: non-wavelength selective branching optocoupler - working in normal environment according to IEC 61753/ITU-T G.671 (non-wavelength selective branching devices for Category U - Uncontrolled environment) (or equivalent).

COMPLIANCES

- Telcordia GR-1209-CORE
- Telcordia GR-1221-CORE

Table1 – 1×N PLC Splitter

Parameters	1×2	1×4	1×8	1×16	1×32	1×64
Operating Wavelength (nm)	1260～1650					
Fiber Type	G657A or customer specified					
Insertion Loss (dB)（S/P Grade）	4.0/3.8	7.3/7.0	10.5/10.2	13.7/13.5	16.9/16.5	21.0/20.5
Loss Uniformity (dB)	0.4	0.6	0.8	1.2	1.5	2.5
Return Loss (dB) （S/P Grade）	50/55	50/55	50/55	50/55	50/55	50/55
Polarization Dependent Loss(PDL, dB)	0.2	0.2	0.3	0.3	0.3	0.4
Directivity (dB)	55	55	55	55	55	55
Wavelength Dependent Loss(dB)	0.3	0.3	0.3	0.5	0.5	0.5
Temperature Stability(-40～85 ℃)(dB)	0.5	0.5	0.5	0.5	0.5	0.5
Operating Temperature (℃)	-40～85					

Storage Temperature (℃)	-40～85					
Mini-Module Dimension (mm) (L×W×H)	60×7×4	60×7×4	60×7×4	60×12×4	80×20×6	100x40x6

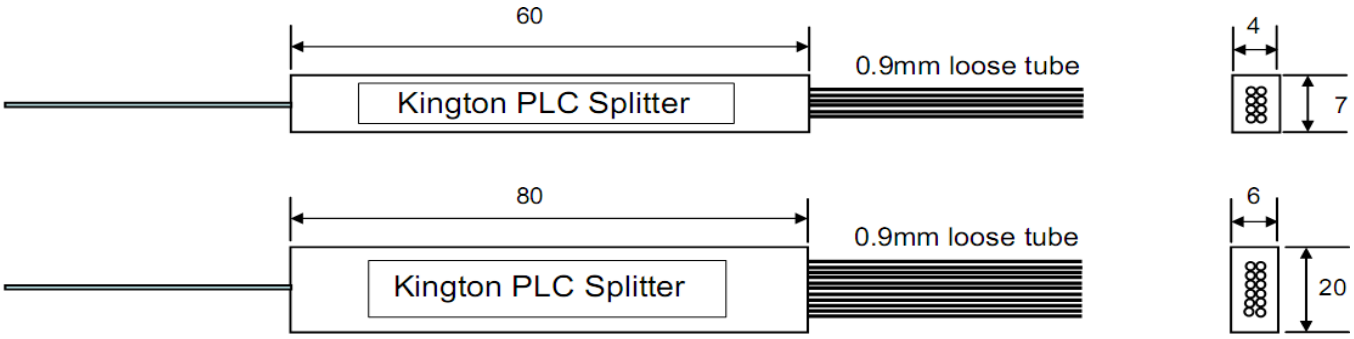
Table 2 – 2×N PLC Splitter

Parameters	2×2	2×4	2×8	2×16	2×32
Operating Wavelength (nm)	1260～1650				
Fiber Type	G657A or customer specified				
Insertion Loss (dB)（S/P Grade）	4.3	7.6	11.0	14.5	17.5
Loss Uniformity (dB)	0.8	1.5	1.5	2.0	2.5
Return Loss (dB) （S/P Grade）	50/55	50/55	50/55	50/55	50/55
Polarization Dependent Loss(PDL, dB)	0.2	0.2	0.3	0.4	0.4
Directivity (dB)	55	55	55	55	55
Wavelength Dependent Loss(dB)	0.3	0.5	0.5	0.5	0.5
Temperature Stability(-40～85 ℃)(dB)	0.5	0.5	0.5	0.5	0.5
Operating Temperature (℃)	-40～85				
Storage Temperature (℃)	-40～85				
Mini-Module Dimension (mm) (L×W×H)	60×7×4	60×7×4	60×7×4	60×12×4	80×20×6

Notes: 1. Specified without connectors.

2. Add an additional 0.25dB loss per connector.

DIMENSIONS



ORDERING INFORMATION

KPMM	XXX	X	X X	X	X X	X	X
	Port	Input Tube Type	Input Fiber Length	Output Tube Type	Output Fiber Length	Input Connector	Output Connector
K=KINGTON P=PLC Splitter M=Module M=Mini	102=1×2 202=2×2 …… 264=2×64	B=250um Bare Fiber L=900um Loose Tube T=900um Tight Buffer	12=1.2M 15-1.5M 150=15M ……	L=900um Loose Tube	12=1.2M 15-1.5M 150=15M ……	0=None 1=FC/UPC 2=FC/APC 3=SC/UPC 4=SC/APC 5=LC/UPC 6=LC/APC X=Customized	0=None 1=FC/UPC 2=FC/APC 3=SC/UPC 4=SC/APC 5=LC/UPC 6=LC/APC X=Customized