

PLC Splitter

Planar lightwave circuit (PLC) splitter is a type of optical power management device that is fabricated using silica optical waveguide technology. It features small size, high reliability, wide operating wavelength range and good channel-to-channel uniformity, and is widely used in PON networks to realize optical signal power splitting. Flyin Optonics provides whole series of 1xN and 2xN splitter products that are tailored for specific applications.

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°C to 85°C
- High reliability and stability

Applications

- FTTX system
- PON network
- CATV link
- Optical signal distribution

Performance Specifications: 1xN PLC Splitter

Parameter	1x2	1x4	1x8	1x16	1x32	1x64	1x128
Operating Wavelength(nm)	1260 ~ 1650						
Fiber Type	G657A1 or customer Specify						
Insertion Loss (dB) (P/S Grade)	2.84/4.0	7.2/7.4	10.3/10.7	13.5/13.7	16.5/16.9	20.5/21.0	23.8/24.2
Loss Uniformity (dB)	≤0.4	≤0.6	≤0.8	≤1.0	≤1.5	≤2.0	≤2.5
PDL(dB)	≤0.1	≤0.1	≤0.1	≤0.20	≤0.25	≤0.3	≤0.4
Return Loss (dB)	≥55	≥55	≥55	≥55	≥55	≥55	≥55
Directivity (dB) Min	55	55	55	55	55	55	55
Wavelength Dependent Loss (dB)	≤0.3	≤0.3	≤0.3	≤0.3	≤0.5	≤0.5	≤0.5
Fiber Length (m)	1.5(±0.1) or Specify						
Temperature Stability(-40°C~85°C)(dB)	≤ 0.5						
Operating Temperature (°C)	-40 ~ 80						
Storage Temperature (°C)	-40 ~ 80						
Maximum Power Handling (mW)	500						

Performance Specifications: 2xN PLC Splitter

Parameter	1x2	1x4	1x8	1x16	1x32	1x64	1x128
Operating Wavelength(nm)	1260 ~ 1650						
Fiber Type	G657A1 or Specify						
Insertion Loss (dB) (P/S Grade)	3.9/4.2	7.3/7.6	10.5/11	14.4/14.6	17.4/17.9	21.0/21.5	24.5/25.0
Loss Uniformity (dB)	≤0.6	≤1.0	≤1.2	≤1.5	≤1.8	≤2.2	≤2.5
PDL(dB)	≤0.2	≤0.2	≤0.2	≤0.3	≤0.3	≤0.3	≤0.4
Return Loss (dB)	≥55	≥55	≥55	≥55	≥55	≥55	≥55
Directivity (dB) Min	55	55	55	55	55	55	55
Wavelength Dependent Loss (dB)	≤0.3	≤0.4	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Fiber Length (m)	1.5(±0.1) or customer Specify						
Temperature Stability(-40°C~85°C)(dB)	≤ 0.5						
Operating Temperature (°C)	-40 ~ 80						
Storage Temperature (°C)	-40 ~ 85						
Maximum Power Handling (mW)	500						

Notes:
1.Specified without connectors.
2.Add an additional 0.2dB loss per connector

Ordering Information

Port	Input pigtail Style	Input Connector	Output pigtail Style	Fiber Length	Output Connector	Package type
0102 = 1x2 0102 = 1x4 0108 = 1x8 0116 = 1x6 0132 = 1x16 0132 = 1x32 0164 = 1x64 1128 = 1x128 0204 = 2x4 0208 = 2x8 0216 = 2x16 0232 = 2x32 0264 = 2x64 2128 = 2x128	0 = bare fiber 1 = 900um Loose tube 2=2.0mm cable 3=3.0mm cable	0=None 1=FC/APC 2=FC/UPC 3=SC/APC 4=SC/UPC 5=LC/APC 6=LC/UPC 7=ST S=Specify	0=bare fiber 1=900um Loose tube 2=2.0mm cable 3=3.0mm cable	0=0.5m 1=1m 2=1.5m 2=2m 4=3m 4=4m S=Specify	0=None 1=FC/APC 2=FC/UPC 3=SC/APC 4=SC/UPC 5=LC/APC 6=LC/UPC 7=ST S=Specify	A=Bare B=Blockless C=ABS box D=Insert type E=Pallet type F=19" 1U Rack S=Specify