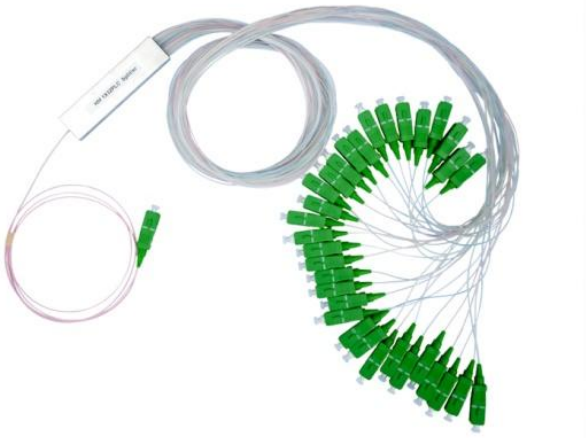
ZUOYEAL

PLANAR LIGHT-WAVE CIRCUIT SPLITTER

1×N
MINI PLC SPLITTER

MODEL **1×2 · 1×4 · 1×8 · 1×16 · 1×32 · 1×64**

PLC (planar light-wave circuit) splitters are fabricated with silica optical waveguide technology: good channel-to-channel uniformity, high reliability and small size, for PON and FTTX networks.



SPLIT RATIO	BANDWIDTH
1×2 - 1×64	**1260-1650 nm**
FIBRE	RETURN LOSS
G657A1	**≥ 55 dB**

01 DESCRIPTION

Description & application

PLC (Planar Light-wave Circuit) splitter is fabricated by using silica optical waveguide technology. It offers good channel-to-channel uniformity, high reliability and small size, and is widely used in PON networks.

KEY POINTS

- Good channel-to-channel uniformity, high reliability and small size
- Widely used in PON networks
- 1×N and 2×N splitters tailored for specific applications
- Customized designs and modular assemblies that integrate other components into a full-function module are available

APPLICATION

- FTTX (FTTP, FTTH, FTTN, FTTC)
- Passive optical network (PON) and CATV system
- Telecommunication network and fibre optic sensors

TWO FORMS

FORM	DESCRIPTION
PLC bare	Steel-tube module, 150 cm input and output fibre, no connector
PLC with connectors	Fan-out assembly with SC or LC connectors

02 PLC BARE

PLC bare





1×4 / 1×8 / 1×16 / 1×32 modules

Bare module

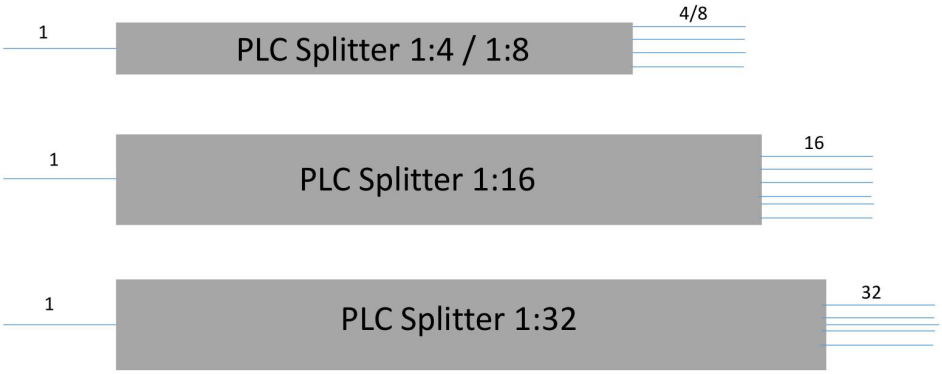


FIG. 1 Port count of the 1:4 / 1:8, 1:16 and 1:32 splitter modules

BARE PLC DIMENSION

DESCRIPTION	UNIT	1×2	1×4	1×8	1×16	1×32	1×64
Module size	mm	60×7×4	60×7×4	60×7×4	60×12×4	80×20×6	100×40×6
Input fibre length	cm	150	150	150	150	150	150
Output fibre length	cm	150	150	150	150	150	150

03 BARE SPEC

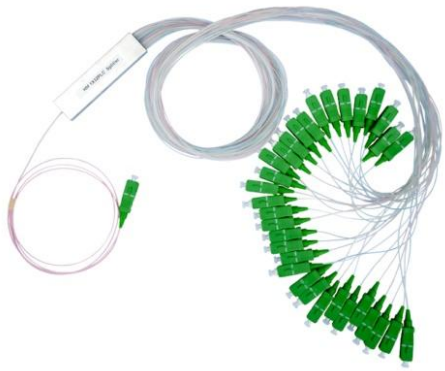
Technical specification — bare PLC splitter

DESCRIPTION	UNIT	1 × 2	1 × 4	1 × 8	1 × 16	1 × 32	1 × 64
Fibre	/	G657A1					
Bandwidth	nm	1260-1650					
Insertion loss (w/o connector)	dB	≤ 3.8	≤ 7.1	≤ 10.2	≤ 13.5	≤ 16.8	≤ 20.1
PDL	dB	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.3	≤ 0.3	≤ 0.3
Loss uniformity	dB	≤ 0.6	≤ 0.6	≤ 0.7	≤ 1.0	≤ 1.0	≤ 1.8
Return loss	dB	≥ 55					
Directivity	dB	≥ 55					
PMD	ps	≤ 0.1					
Storage temperature	°C	−40 to +85					
Connector	/	None					

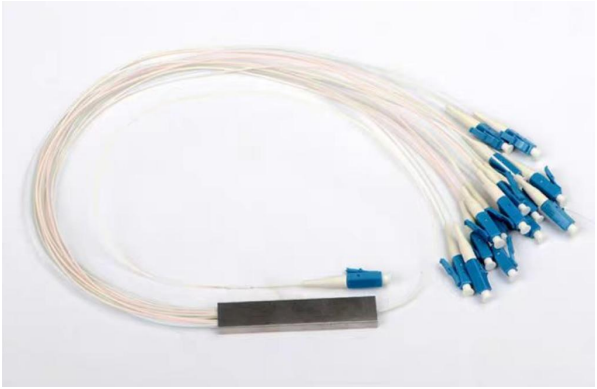
Values are quoted for the module without connectors; modules are supplied in 1×2 to 1×64 configurations.

04 CONNECTORS

PLC with connectors



SC connectorised fan-out



LC connectorised fan-out

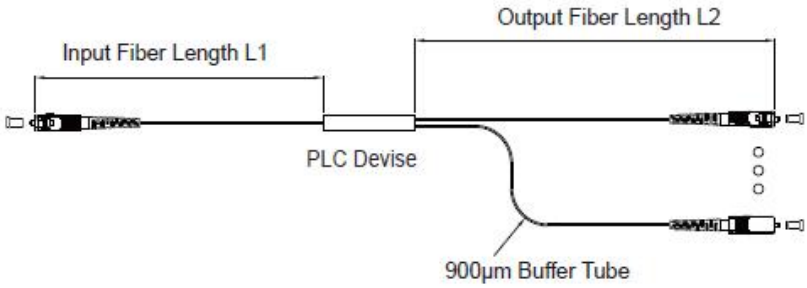


FIG. 2 Input fibre length L1 and output fibre length L2 on 900 μm buffer tube

PLC DIMENSION

DESCRIPTION	UNIT	1×2	1×4	1×8	1×16	1×32	1×64
Module size	mm	60×7×4	60×7×4	60×7×4	60×12×4	80×20×6	100×40×6
Input fibre length	cm	150	150	150	150	150	150
Output fibre length	cm	150	150	150	150	150	150

05 CONNECTOR SPEC

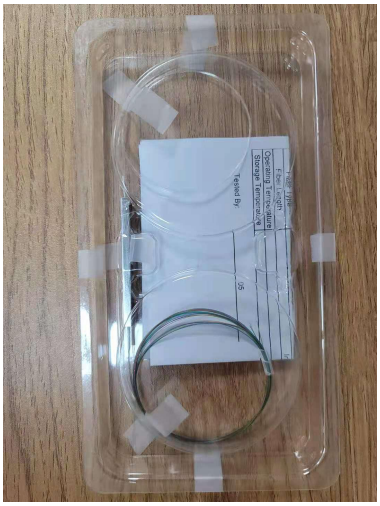
Technical specification — PLC splitter with connectors

DESCRIPTION	UNIT	1 × 2	1 × 4	1 × 8	1 × 16	1 × 32	1 × 64
Fibre	/	G657A1					
Bandwidth	nm	1260-1650					
Insertion loss (with connector)	dB	≤ 3.9	≤ 7.4	≤ 10.5	≤ 13.7	≤ 17.0	≤ 20.7
PDL	dB	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.3	≤ 0.3	≤ 0.3
Loss uniformity	dB	≤ 0.6	≤ 0.6	≤ 0.7	≤ 1.0	≤ 1.0	≤ 1.8
Return loss	dB	≥ 55					
Directivity	dB	≥ 55					
PMD	ps	≤ 0.1					
Storage temperature	°C	−40 to +85					
Connector	/	SC or LC					

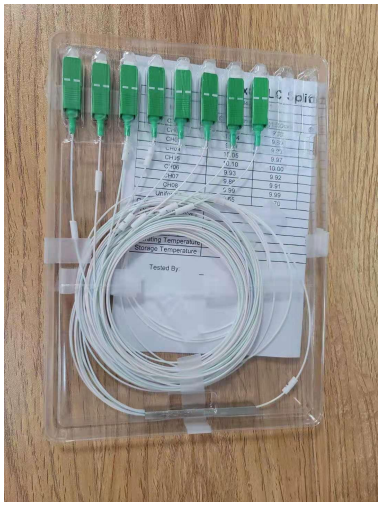
06 PACKING

Packing information

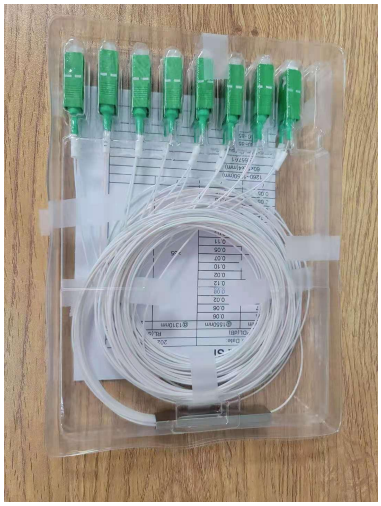
For reference — blister pack with test report, one splitter per pack.



1:4 PLC splitter



1:8 PLC splitter



1:16 PLC splitter

ZUOYEAL

ZUOYEAL TECHNOLOGY

Connecting More, With Fiber

This datasheet describes the mini PLC splitter series at the time of publication. Specifications and dimensions may change without notice; confirm current values with ZUOYEAL before ordering.

1×2 – 1×64 · 1260 – 1650 nm · G657A1

Connecting More, With Fiber