

PLANAR LIGHTWAVE CIRCUIT (PLC) SPLITTER

A slimline Splitter for use in Fibre To The Home (FTTH) PON Networks



High Quality Product



FTTH Application



High Bend Tolerance



Slim Packaging

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fibre optic assembly specialists VERSION 1 NOVEMBER 2023

PLANAR LIGHTWAVE CIRCUIT (PLC) SPLITTER



Planar Lightwave Circuits (PLC) are primarily used within PON networks to distribute optical signals from Central Office (CO) to multiple premise locations. Splitters divide the signal into equal parts, in accordance with the number of fibres inside; for example, 1 into 16 with equal ratio.

Fibre input on the PLC is connected to the trunk cable with the output fibres directed towards the premises. Allowing for better utilisation of individual fibres originating from the central office. They are produced using silica optical waveguide technology which provides excellent uniformity, low insertion loss, low polarisation dependent loss and very high reliability.

Leader Optec provides PLC's in 1x2, 1x4, 1x8, 1x16, 1x32, 1x64 & 1x128 formats and are fitted either with or without connectors. Packaging styles vary from 250µm (bare fibre), 900µm, 2mm ruggedised and cassette options.

FEATURES

- Wide range up to 1x128 fibre
- Ruggedised 3mm, 2mm, 900um & 250um versions
- A solution for covering most closure styles
- Available with or without connectors

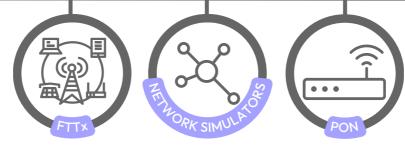
BENEFITS

- Fast, Reliable and repeatable
- Increases network capacity
- Greater utilisation of each trunk fibre
- Cost effective solutior

EXTRA INFORMATION

- Can be terminated with LC/APC, SC/APC, E2000/APC
- 250µm, 900µm, ruggedised tails or cassette formats available
- Bare fibre PLC's are packaged in a blister pack with up to 2 x PLC's per pack
- Also available in 1x2, 1x4, 1x8, 1x16, 1x32, 1x64 and 1x128 fibres
- Fibres are ribbonised close to the cartridge in the standard fibre colour order making identification easier
- The ribbon transitions to single fibres away from the cassette for splicing or termination

APPLICATIONS



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SPECIFICATIONS

Input x Output Port Number		1x2	1x4	1x8	1x16	1x32	1x64	
Optical Fibre Diameter		μm	9/125					
Operating Wavelength		nm	1260-1650					
Insertion Loss* (Include PDL)	Typical	dB	≤3.6	≤7.0	≤10.3	≤13.6	≤16.6	≤20.1
	Max	dB	4	7.1	10.5	13.7	16.9	≤20.1
Uniformity* MAX.		dB	0.5	0.7	1	1.5	2	2
PDL* MAX		dB	0.3	0.3	0.3	0.3	0.3	0.5
Return Loss*		dB	≥55	≥55	≥55	≥55	≥55	≥55
Directivity*		dB	≥55	≥55	≥55	≥55	≥55	≥55
Output Fibre Type			4 Fibre Ribbon x1		4 Fibre Ribbon x2	8 Fibre Ribbon x2	8 Fibre Ribbon x4	8 Fibre Ribbon x8
Case Size For 250 µm		mm	40x4x4				50x7x4	60x12x4
Case Size For 900µm		mm	60x7x4			60x12x4	80x20x6	100x40x6
Operation Temperature		°C	-40~85					

*Characteristics are without connectors under room temperature at 1310nm/1550nm. All dimension follow an LxWxH format.

COMPLEMENTARY PRODUCTS



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