



PLC Splitter

FTTx (Fibre-to-the-end user) is the most future-proof technique for transmission of broadband multimedia applications. In a Passive Optical Network (PON) network, a single fibre can run from the exchange to a subdivision or office park, and then individual fibre strand to each subscriber.

Optotec PLC splitters are based on silica-on-silicon technology and have excellent optical, reliability and size characteristics designed for outside plant conditions. Splitters can be provided in small de-ribboned packages or integrated solution pre-assembled either in splicing modules or pre-connectorized within sub-racks.

Recognized in the industry for their small footprint and cost-effective performance, Optotec's integrated passive modules offer more reliability and scalability and provide the flexibility to function in both current and future optical networks.

They can be supplied in a range of packaging options. They can also be supplied with the input and output legs terminated with SC/ APC connectors. The splitters can also be pre-installed by Optotec into a number of connectivity products. For further information, please contact Optotec.

KEY FEATURES AND BENEFITS

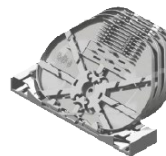
- Low excess loss, good spectral uniformity and PDL
- Excellent mechanical and environmental performances
- Assembled and tested for operation in outside plant conditions

APPLICATIONS

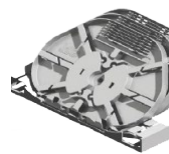
- Passive Optical Networks (x-PON)

Monitor 1:2 unbalanced FBT splitters, both SM and MM, are available upon request

The tray as option, can have a cover.
To be order separately



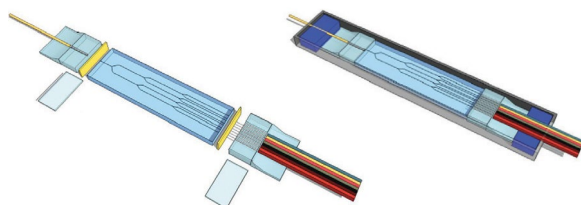
SAM-HD4-12H-2PLC
2 splitters capacity - up to 12 fibre



SAM-HD3-18H-1PLC
1 splitters capacity - up to 18 fibre



SAM-HD1-18H-1PLC
1 splitters capacity - up to 18 fibre



REFERENCE PN	DESCRIPTION
SAM-HD4-12H-2PLC	Module with 4 trays: 2 splitters capacity and up to 12 fibre-term per tray - without Universal Cover. Total splices per module: up to 48.
SAM-HD1-18H-1PLC	Module with 1 trays: 1 splitters capacity and up to 18 fibre-term per tray - without Universal Cover. Total splices per module: up to 18.
UC-UNIVERSAL COVER	1 Universal Cover for 1 High Density tray belonging to series SAM and SAMR.

SPECIFICATIONS

PARAMETERS	UNIT	1X2	1X4	1X8	1X16	1X32
Wavelength Band	nm	1260 to 1650				
Insertion Loss @1310 nm and 1550 nm	dB [max]	3.8	7.1	10.4	13.3	16.5
Loss Uniformity	dB [max]	0.6	0.7	1.0	1.3	1.6
PDL - Polarization Dependent Loss	dB [max]	0.3				

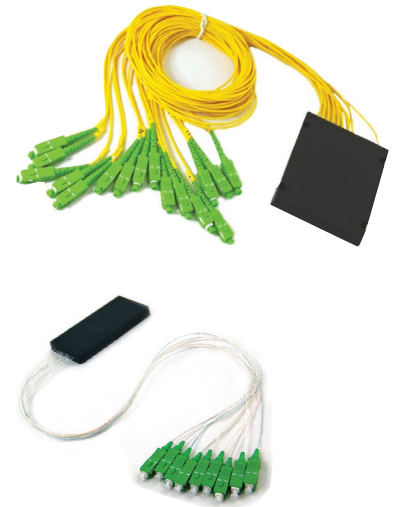
PARAMETERS	UNIT	2X2	2X4	2X8	2X16	2X32
Wavelength Band	nm	1260 to 1650				
Insertion Loss @1310 nm and 1550 nm	dB [max]	4.0	7.5	10.9	14.0	17.2
Loss Uniformity	dB [max]	0.8	1.2	1.5	1.8	2.4
PDL - Polarization Dependent Loss	dB [max]	0.4				
Directivity and Return Loss	dB [min]	50 or 55				
Fibre Type Ribbon Outputs	ITU-T G.657 A1	Deribbonized Single 250 Qm Fibres				
Operating Temperature	°C	-40 to +85				
Size Bare Fibre	mm	4.0 x 4.0 x 40			7.0 x 4.0 x 60	
Size Jacket Fibre	mm	10 x 80 x 100 black Aluminum Case				
		10 x 45 x 100 black ABS Plastic Case				

Note: Including PDL, WDL without TDL (extra 0.3dB per connector compared to bare fibre splitter performance)

Optotec uses chips made by CVD (chemical vapor deposition) technology. CVD is superior to other techniques like ion exchange in terms of chip yield and uniformity of optical specifications

For large volume production. CVD chips sizes are also much smaller compared to ion exchange chips. Wafer preparation and substrate material quality, photolithography masking process, accurate ion-exchanging gives good optical properties. Pig tailing and packaging phases are fundamental in quality reliability and stability of the splitters.

Unlike the FBTs, PLC splitters have quite flat spectral response, no water-peak loss, very low PDL and cost-effective very small size on high count port. Ribbonized PLC splitters, fan-out assemblies, custom sizes pre-connectorized modules and pre-loaded SAM and HD cassettes are available on request!



REFERENCE PN	DESCRIPTION
OPT-PLC-104-00-A00NN	Bare Fibres1:4 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-108-00-A00NN	Bare Fibres1:8 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-116-00-A00NN	Bare Fibres1:16 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-132-00-A00NN	Bare Fibres1:32 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-202-00-A00NN	Bare Fibres2:2 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-204-00-A00NN	Bare Fibres2:4 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-208-00-A00NN	Bare Fibres2:8 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-216-00-A00NN	Bare Fibres2:16 PLC splitter 2 m 250 Qm deribbonized out
OPT-PLC-232-00-A00NN	Bare Fibres2:32 PLC splitter 2 m 250 Qm deribbonized out

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