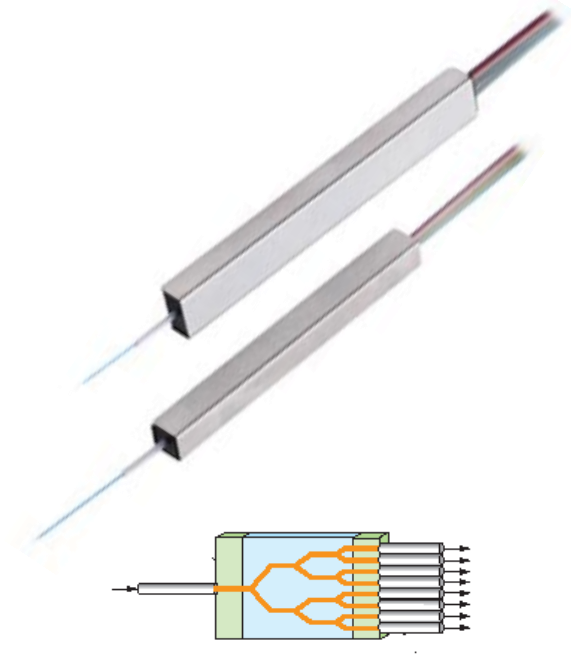
Optical Coupler/Splitter



Description

With the evolution of optical fiber networks, the need for multiple distribution of optical signals is crucial. For this application TELNET Redes Inteligentes SA offers its range of **monomode and multimode Couplers/Dividers**. These devices are used to divide the input signal into N branches out with minimal losses.

The possibility of using different architectures for sharing optical signals, allows the service provider to configure its network as effectively as possible. These couplers dividers are widely used in CATV networks for TV distribution, as well as GPON and EPON FTTH networks.

Couplers/Dividers for single-mode fiber with low radius of curvature consist of one or two branches of entry and multiple outputs(2, 4, 8, 16, 32, 64). They are designed to introduce insertion losses of approximately equal in all its output branches. The connection ends terminated with connectors can be supplied to the client's request, may be both angular convex polishing with high return loss (FC/APC, SC/APC), or convex polishing (FC/PC, SC/PC, ST/PC).

Each coupler/splitter is supplied with measures marked of Insertion Loss (IL) and Return Loss (RL) of each of its branches.

The fibers of the different branches can be presented in both fiber of 250µm, 900µm tight protection or monofibra cable with a 3mm diameter.

Features

PLC Technology
The PLC splitters (Planar Lightwave Circuits) are developed based on optical waveguide on a silicon substrate. This technology allows the construction of high performance optical splitters, high channel density and low size.

High number of channels
Up to 1x64 channels in a compact and robust packaging that facilitates installation in trays, 19" modules and cassettes.

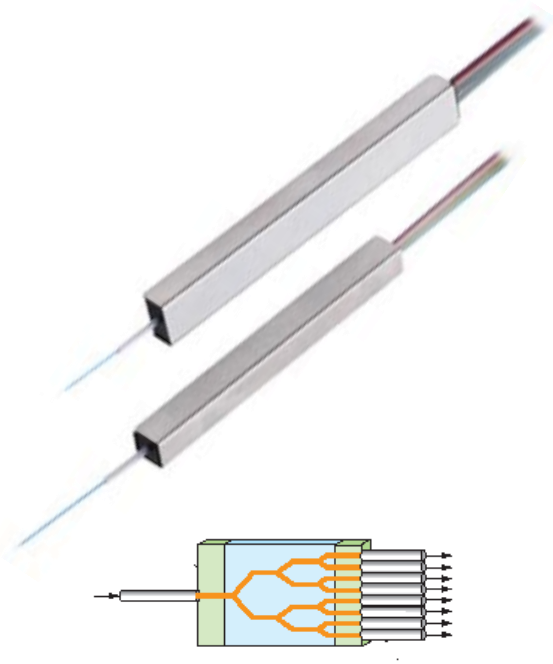
Flexibility
Solutions tailored to CATV, GPON and EPON FTTH networks projects.

Optical response
The family of TELNET couplers/splitters maintain the optical response in a wide range of temperatures ranging from -40 to 85°C .

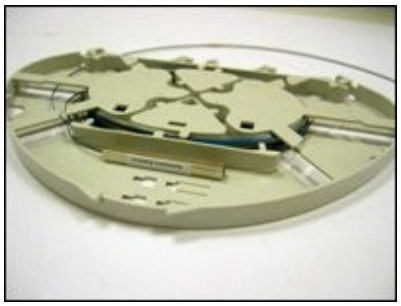
Reliability
The TELNET optical couplers/splitters meet and improve the Telcordia GR-1209-CORE and GR-1221-CORE requirements.

Technical Specifications

Optical characteristics and dimensions						
	1x2	**1x4**	**1x8**	**1x16**	**1x32**	**1x64**
Wavelenght	1260-1360 nm, 1480-1625 nm					
Technology	Fusión	PLC				
Insertin loss (dB)	≤ 3,5	≤ 7,5	≤ 10,3	≤ 13,5	≤ 16,7	≤ 20,4
PDL (dB)	≤ 0,2	≤ 0,2	≤ 0,2	≤ 0,2	≤ 0,2	≤ 0,3
Uniformity (dB)	≤ 0,7	≤ 0,8	≤ 1,0	≤ 1,0	≤ 1,3	≤ 2,0
Return Loss (dB)	> 50	≥ 55				
Directivity (dB)	> 50	≥ 60				
Operation Temperature (°C)	- 20 / 70	- 40 / 85				
Input	Monomode fiber Ø 250 µm of low bending radius					
Min. Lenght of fibers (m)	≥ 4,0					
Outputs	2 fibers SM	Ribbon 4 fibers x1	Ribbon 4 Fibers x 2	Ribbon 8 Fibers x 2	Ribbon 8 Fibers x4	Ribbon 8 Fibers x8
Dimensions (mm)	Ø 3,2x55	4 x 4 38	4x4x40	7x4x46,9	7x4x 46,9	12x4x58

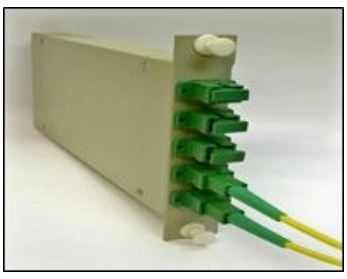


Mechanical Display Options			
Presentation	**Size**	**Type of splitter**	**Terminations**
SE Tray	15 x 10 máxima	1x2, 1x4, 1x8, 1x16, 1x32, 1x64	Fibra biult at 900 µm
19" module	438x44x222 438x88x222	1x4, 1x8, 1x16, 1x32 (1 UA)1x64 (2 UA)	Adapters (FC/APC, SC/APC)
Cassette	94x23x195 (3 UA)	1x2, 1x4 (1 slot) 1x8 (2 slot) 1x16 (3 slot) 1x32 (5 slot) 1x64 (9 slot)	Cord 3 mm



SE tray

19" module



Cassette

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