

FIBER OPTIC SPLITTER PANEL, 19" RACK-MOUNT, LC/APC, 2:32 SPLITTER, 1 INSTANCE

(TN7301AWOP40)



Product Description

TEXA Network's Splitter panel is a vital component in any GPON/FTTx infrastructure. Designed in conjunction with leading Service Providers This compact, integrated panel offers pre-connectorised presentation of the input and output ports on the front of the panel. Each port is clearly labeled. The splitter consist of waveguides chip, optical fiber array and Pigtailed. The Fiber used in TEXA Network's splitter panel, is made of pure silica and germanium doped silica. A UV curable acrylate material is applied over the Fiber Cladding as primary protective coating.

Features & Benefits

- Installed in 19" Standard Rack
- Small Size and aesthetic appearance.
- Quick Installation, Reliable Performance and Stable.
- Wide Operating wavelength range
- Good uniformity with respect to PON application
- Cassette Type Splitter- 2:32
- The PLC Splitter comes with pre-connectorised LC/APC connectors. The end faces are still curved but are angled at an industry standard 8°. This maintains a tight connection, and it reduces back reflection to about -70 dB. APC type connector back reflection does not degrade with repeated mating.
- Outer Sheath of Pigtail is PVC
- Fiber Type is G.657A1
- 25 Years System Warranty
- Length of Pigtail is 0.5m
- Diameter for Fiber cable of Pigtail is 2.0mm
- Product Dimension: 430mm (W) x 200mm (D) x 43.5mm (H)

The Fiber Optic Splitter Panel are designed, Manufactured and tested according to belowstandards:

- IEC60793-1:Optical Fiber Part 1: Generic Specification
- IEC60793-2:Optical Fiber Part 2: Product Specification
- IEC60794-2:Optical Fiber Cables Part 2 Indoor cables- Sectional Specification
- ITU-TG652:Characteristics of a Single-mode optical fiber and cable
- ITU-TG.655:Characteristics of a non-zero dispersion-shifted single-mode optical fiber and cable
- ITU-TG.657:Characteristics of a bending-loss insensitive single-mode optical fiber
- YD/T2000.1-2009: Integrated optical path devices based on planar light wave circuit Part 1: Optical power splitter based on PLC technology
- IEC61300-2-5: Fiber optic interconnecting devices and passive components-Basic test and measurement procedures-Part 2-5:Tests–Torsion
- IEC61300-2-17: Fiber optic interconnecting devices and passive components– Basic test and measurement procedures–Part 2-17: Tests–Cold
- IEC61300-2-22: Fiber optic interconnecting devices and passive components-Basic test and measurement procedures-Part 2-22: Tests–Change of temperature
- IEC61300-3-1: Fiber optic interconnecting devices and passive components-Basic test and measurement procedures–Visual examination
- IEC61300-3-6: Fiber optic interconnecting devices and passive components–Basic test and measurement procedures-Examinations and measurements-Return loss
- IEC61300-3-34: Fiber optic interconnecting devices and passive components–Basic test and measurement procedures-Examinations and measurements–Attenuation of random mated connectors.
- IEC61300-3-34: Fiber optic interconnecting devices and passive components–Basic test and measurement procedures-Examinations and measurements–Attenuation of random mated connectors.

Optical Characteristics of PLC Splitter

Splitter Type	2x32
Channel wavelength (nm)	1260-1650
Insertion Loss (dB)	≤ 17.9
Loss Uniformity (dB)	≤ 1.5
Return Loss (dB)	≥ 50 (APC)
PolarizationDependent Loss (dB)	≤ 0.3
Directivity (dB)	≥ 55
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +85°C

Note:

1: Above insertion loss values are measured at indoor temperature, including the connector loss;

2: Insertion loss of PLC splitter including adapters, should plus 0.2dB base on above insertion loss;

3: Insertion loss of PLC splitter without connectors, should minus 0.2dB base on above insertion loss.

Technical Characteristics of LC Connector

Fiber Type	Single mode OS2
ConnectorType	LC
ConnectorSurface	APC (Angled Physical Contact)
Insertion Loss (dB)	≤ 0.3
Return Loss (dB)	≥ 60
Operating Temperature Range	-25°C to +70°C
Storage Temperature Range	-25°C to +70°C
Durability	> 500 times
Standard	IEC 601754-20

Technical Characteristics of LC Adapter

Fiber Type	Single mode
Adapter Type	LC
Insertion Loss (dB)	≤ 0.20
Repeatability (dB)	≤ 0.20
Interchangeability(dB)	≤ 0.20
Operating Temperature Range	-25°C to +70°C
Storage Temperature Range	-25°C to +70°C
Durability	> 500 times
Standard	IEC 601754-20

Factory Tests

Tests	Test Content and Criteria Data
Visual Examination	Be smooth, clean, without oily be soiled, no scar and crack. The whole device is firm, the tail fiber without loosening or with the connector plug is smooth.
Insertion Loss	$\leq 0.3\text{dB}$ (Connector)
ReturnLoss	$\geq 60\text{dB}$ (Connector)
Mechanical Durability	Plug and pull out for 500 mes, No scratch and meet op cal performance.
Cold	Temperature: -40°C , -20°C , -10°C . (Choose one according to requirements). Time: 96h. The rate of change of temperature shall not exceed $1^{\circ}\text{C}/\text{min}$, averaged over a maximum period of 5 min. Result: no scar and crack.
Torsion	Load: 2N. Twist angle: 180° . Number of cycles: 25
Temperature Cycling	Range: $-10^{\circ}\text{C}\sim+60^{\circ}\text{C}$, 5 cycle. Change speed: $(1\pm 0.2)^{\circ}\text{C}/\text{min}$; Result: $\Delta\text{IL} \leq 0.2\text{dB}$, $\Delta\text{RL} < 5\text{dB}$

Tests done with referenceto below standards

- IEC 61754-20: Fiber Optic inter connecting devices and passive components– Fiber Optic Connector Interfaces– Part 20: Type LC connector family
- IEC 61300-3-1: Fiber Optic inter connecting devices and passive components– Basic Test and Measurement procedures– Visual Examination
- IEC 61300-2-5: Fiber optic interconnecting devices and passive components– Basic test and measurement procedures- Tests–Torsion
- IEC 61300-2-17: Fiber optic interconnecting devices and passive components– Basic test and measurement procedures–Tests–Cold.
- IEC61300-2-22: Fiber Optic inter connecting devices and passive components– Basic Test and Measurement procedures– Examinations and Measurements– Change of Temperature.
- IEC 61300-3-6: Basic Test and Measurement procedures- Examinations and Measurements Return loss
- IEC61300-3-34: Basic Test and Measurement procedures- Examinations and Measurements Attenuation of random mated connectors
- YDT 2000.1-2009 Integrated optical path devices based on planar lightwave circuit Part 1: Optical power splitter based on PLC technology