

## **FIBER OPTIC COMBO SPLITTER PANEL 19" RACK-MOUNT LC/APC 2:2 & 2:16**

(TN7408SP19RLC22)



### **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. TEXA Network quality personals ensures product reliability through rigorous qualification testing to assure cable performance and durability in adverse field environments.

## 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 Nos. of 2:2 and 2 Nos. of 2:16
- 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)

## Optical Characteristics of PLC Splitter

Splitter Type	2 x 2	2 x 16
Channel wavelength (nm)	1260-1650	
Insertion Loss (dB)	≤ 4.5	≤ 14.8
Loss Uniformity (dB)	≤ 0.8	≤ 1.5
Return Loss (dB)	≥ 55 (APC)	
Polarization Dependent Loss (dB)	≤ 0.2	≤ 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 based on above insertion loss;
- 3: Insertion loss of PLC splitter without connectors, should minus 0.2dB based on above insertion loss.

## Technical Characteristics

ConnectorType	LC/APC
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 mes
Standard	IEC 601754-20

Test	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	≤ 0.3dB (Connector)
Return Loss	≥ 60dB (Connector)
Mechanical Durability	Plug and pull out for 500 mes, No scratch and meet optical 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 °C/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°C~+60°C, 5 cycle. Change speed: (1±0.2)°C/min; Result: ΔIL ≤ 0.2dB, ΔRL < 5dB

## **The Fiber Optical Splitter Panel are designed, Manufactured and tested according to below standards:**

- IEC 60793-1: Optical Fiber Part 1: Generic Specification
- IEC 60793-2: Optical Fiber Part 2: Product Specification
- IEC 60794-2: Optical Fiber Cables Part 2 Indoor cables-Sectional Specification
- ITU-TG652: Characteristics of a Single-mode optical fiber and cable
- ITU-T G.655: Characteristics of a non-zero dispersion-shifted single-mode optical fiber and cable
- ITU-T G.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 optical inter connecting devices and passive components-Basic test and measurement procedures-Part 2-5: Tests-Torsion
- IEC61300-2-17: Fiber optical interconnecting devices and passive components-Basic test and measurement procedures-Part 2-17 Tests-Cold
- IEC61300-2-22: Fiber optical inter connecting devices and passive components-Basic test and measurement procedures-Part 2-22: Tests-Change of temperature
- IEC61300-3-1: Fiber optical inter connecting devices and passive components-Basic test and measurement procedures-Visual examination
- IEC61300-3-6: Fiber optical inter connecting devices and passive components-Basic test and measurement procedures-Examinations and measurements-Return loss
- IEC61300-3-34: Fiber optical inter connecting devices and passive components-Basic test and measurement procedures-Examinations and measurements-Attenuation of random mated connectors.