

INDOOR MICRO MODULE FO CABLE RISER RATED LSZH

TN7004IMCRLS



Description

TEXA NETWORK's Indoor Riser Rated Micro Module cable is designed specifically for indoor distribution applications requiring low to higher core-counts. The Single-mode FO cable comes in G.657A2 specifications. Cable with G.657A2 specifications provides the bend-insensitivity and robustness essential to a successful FTTH deployment. Circular construction and the aramid yarn strength member make this cable ideal for mainly indoor deployments where riser and/or containment spaces are limited.

The Fiber used in TEXA NETWORK's Fiber Optic cables, are 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. Excellent quality control is achieved through intense in-house quality check and stringent audit acceptance by ISO 9001.

Features & Benefits

- Available as G.657A2
- Approved by Global Service Providers
- High Tensile Aramid Yarn Strength Member on the Peripheral
- LSZH Sheath
- Predictable life time of 30 years
- Complies with Telcordia GR-20 core
- Color code scheme: According to TIA568-C

The Fiber within FO cable are designed, Manufactured and tested according to below standards:

- IEC60793-1: Optical Fiber Part 1: Generic Specification
- IEC60793-2: Optical Fiber Part 2: Product Specification
- IEC 60794-2-21: Optical fiber cables- Part 2-21: Indoor cables- Detailed specification for multi-fiber optical distribution cables for use in premises cabling
- 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-lossinsensitive single-mode optical fiber

Optical Fiber G.657A2 Specification

Category	Description	Values
Optical Specifications	Attenuation @1310 nm	≤0.36 dB/km
	Attenuation @1550 nm	≤0.23 dB/km
	Cable Cutoff Wavelength (λ _{cc})	≤1260 nm
	PMD	≤ 0.2 ps/√km

Construction of Fiber Optic Cable

Fiber count	48	72	96	144
Number of Micro Modules	4	6	8	12
Micro Module Material	Thermoplastic Material			
Fiber within each Micro Module	12	12	12	12
Micro Module Material	High Tensile Aramid Yarns			
Cable Outer Sheath	LSZH (Yellow)			
	7.7 mm ± 5%	8.7 mm ± 5%	9.2 mm ± 5%	10.2 mm ± 5%
Cable weight	42 kg/km ± 15%	55 kg/km ± 15%	60 kg/km ± 15%	72 kg/km ± 15%
Cable Length	2KM ± 5%			

Mechanical Characteristics of Fiber Optic Cable

Temperature Range (IEC 60794-1-2-F1)	Laying and installation Operation Transport and Storage	-5° to +45°C -30° to +60°C -40° to +70°C
Cable Bending Radius (IEC 60794-1-2-E11A)	Static Dynamic	15 x D, D = Cable Diameter 10 x D, D = Cable Diameter
Tensile Force (IEC 60794-1-2-E1)	1*W*9.81, W = Cable Weight per 1 Km 600N	
Crush Resistance (IEC 60794-1-2-E3)	100N/10cm	
Impact Resistance (IEC 60794-1-2-E4)	3 Nm	
Torsion	±180°, L=40N	

Routine Factory tests of single-mode Optical fiber

Parameters	Test Standards
Mode field diameter	IEC 60793-1-45.
Mode field Core/clad concentricity	IEC 60793-1-20
Cladding diameter	IEC 60793-1-20
Cladding non-circularity	IEC 60793-1-20
Attenuation coefficient	IEC 60793-1-40
Chromatic dispersion	IEC 60793-1-42

Factory Test List for Fiber Optic Cable

Tension Loading Test

Test Standard	IEC 60794-1-2 E1
Sample Length	No less than 50 meters
Load	Max. tension load
Duration time	1 minute
Test results	Additional attenuation ≤ 0.4dB
	No damage to outer jacket and inner elements

Crush/ Compression Test

Test Standard	IEC 60794-1-2 E3
Load	Crush load
Duration time	1 minute
Test number	1
Test results	Additional attenuation $\leq 0.4\text{dB}$
	No damage to outer jacket and inner elements

Impact Resistance Test

Test Standard	IEC 60794-1-2 E4
Impact energy	1J
Radius	12.5mm
Impact Points	3
Impact Number	1
Test results	Additional attenuation $\leq 0.4\text{dB}$
	No damage to outer jacket and inner elements

Part Number

(TN7004IMCRLS)

Fiber Optic Indoor Micro Module cable, 48 core, Riser Rated, Single-mode OS2, LSZH, G657A2, Yellow