

## Fiber Optic Cables

Rev. 1-2020

## Micro-Module Indoor-Purpose Fiber Optic Cable

Type: MMIP 96/M8 G.657A1 2SFRP SJ LSZH 0.5kN D10.5



### **Application & Standards**

- ~ For indoor applications;
- ~ Fully dielectric cable;
- ~ Easy strippable micro-modules without any tools needed;
- ~ IEC 60794-1-2 Basic optical cable test procedures;
- ~ ITU-T G.657A1 -Characteristics of a bending-loss insensitive single-mode optical fibre and cable

#### **Cable Construction**

- ~ Optical Fibres
- ~ Easy strippable micromodule with dry core;
- ~ Strength Member (2 side FRP)
- ~ Outer Sheath (White LSZH)

CPR Class: Dca s1b d2 a2

#### **Technical Characteristics**

Optical Fiber Performance - G.657A1							
Characteristic	Specified Value						
Attenuation Coefficient:							
at 1310nm :	≤ 0.35 dB/km						
at 1550nm :	≤ 0.21 dB/km						
at 1625nm :	≤ 0.23 dB/km						
Mode Field Diameter:							
at 1310nm	8.8±0.4μm						
Chromatic Dispersion:							
at 1330nm	≤ 3.5 ps/(nm.km)						

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The above design is only a sample of the options available. Contact our sales team for other specifications. Our policy of continuous improvement may result in a change of specifications without notice.



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at 1550nm	≤17 ps/(nm.km)				
at 1625nm	≤ 22 ps/(nm.km)				
Zero Dispersion Wavelength	1300 ~ 1324 nm				
Zero Dispersion Slope	≤ 0.092 ps/(nm².km)				
Cable Cut off Wavelength (λcc)	≤ 1260 nm				
	10 cycles ø 15mm at 1550	≤ 0.25 dB			
Macro Bending Loss	10 cycles ø 15mm at 1625	≤ 1.0 dB			
	1 cycle ø 10mm at 1550	≤ 0.75 dB			
	1 cycle ø 10mm at 1625	≤ 1.50 dB			
Cladding Diameter	125 ±0.7 μm				
Cladding Non-Circularity	≤0.7%				
Core-Cladding Concentricity error	≤ 0.6 µm				
Proof Test	≥ 0.69 GPa (100kpsi)				
Dynamic Fatigue	≥ 20				

Fiber Optic Cable Parameters							
Fiber Type **	G.657A1						
Fiber Count	96						
Module Count	12						
Approximate Cable Diameter (mm)	10.5						
Approximate Cable Weight (kg/km)	90						
Tensile Strength (Short Term) - Fiber Strain ≤0.33%	500 N						
Crush (1 min.)	1000N/10cm						
Impact	5J, R=300mm, 3 points						
Torsion	100N, 3 cycles, ±180°						
Minimum Bending Radius (Installing)	20 x D						
Minimum Bending Radius (Operating)	10 x D						
Temperature (Operation)	-30°C ~ +60 °C						
Temperature (Transportation and Storage)	-30°C ∼ +70 °C						
Packing	Wooden drum with protection						
Delivery Lengths	To be confirmed, ± %5 tolerance						
	<pre><optivine> + <mmip 2sfrp="" 96="" g.657a1="" m8="" pre="" sj<=""></mmip></optivine></pre>						
Marking	LSZH 0.5kN D10.5> + <manufacturing date=""> +</manufacturing>						
	<length marking=""></length>						

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Fiber Color Identification*												
No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Yellow	Brown	Violet	Turquoise	Black	Pink	Blue	White	Grey	Orange

Module Color Identification**												
No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Red	Green	Yellow	Brown	Violet	Turquoise	Black	Pink	Blue	White	Grey	Orange

- \* When tubes go beyond 12 fibers, the color code repeats and black rings are used to distinguish the fibers.
- \*\* When cables go beyond 12 tubes, the color code repeats and black rings are used to distinguish the tubes.
- \*\*\* Customized solutions can be offered upon request.
- \*\*\*\* Drawing it's for indicative purpose only.