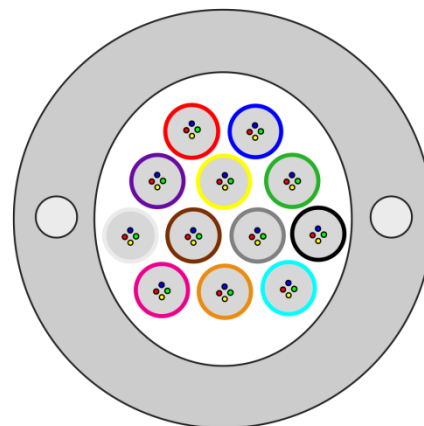


Micro-Module Indoor-Purpose Fiber Optic Cable

Type: MMIP 48/M4 G.657A1 2SFRP SJ LSZH 0.5kN D8



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	$8.8 \pm 0.4 \mu\text{m}$
Chromatic Dispersion:	
at 1330nm	≤ 3.5 ps/(nm.km)

at 1550nm	≤ 17 ps/(nm.km)	
at 1625nm	≤ 22 ps/(nm.km)	
Zero Dispersion Wavelength	1300 ~ 1324 nm	
Zero Dispersion Slope	≤ 0.092 ps/(nm ² .km)	
Cable Cut off Wavelength (λ_{cc})	≤ 1260 nm	
Macro Bending Loss	10 cycles \varnothing 15mm at 1550	≤ 0.25 dB
	10 cycles \varnothing 15mm at 1625	≤ 1.0 dB
	1 cycle \varnothing 10mm at 1550	≤ 0.75 dB
	1 cycle \varnothing 10mm at 1625	≤ 1.50 dB
Cladding Diameter	125 ± 0.7 μ m	
Cladding Non-Circularity	$\leq 0.7\%$	
Core-Cladding Concentricity error	≤ 0.6 μ m	
Proof Test	≥ 0.69 GPa (100kpsi)	
Dynamic Fatigue	≥ 20	

Fiber Optic Cable Parameters	
Fiber Type	G.657A1
Fiber Count	48
Module Count	12
Approximate Cable Diameter (mm)	8.0
Approximate Cable Weight (kg/km)	65
Tensile Strength (Short Term) - Fiber Strain $\leq 0.33\%$	500 N
Crush (1 min.)	1000N/10cm
Impact	5J, R=300mm, 3 points
Torsion	100N, 3 cycles, $\pm 180^\circ$
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, $\pm 5\%$ tolerance
Marking	<OPTIVINE> + <MMIP 48/M4 G.657A1 2SFRP SJ LSZH 0.5kN D8> + <manufacturing date> + <length marking>

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.

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*** Customized solutions can be offered upon request.

**** Drawing it's for indicative purpose only.