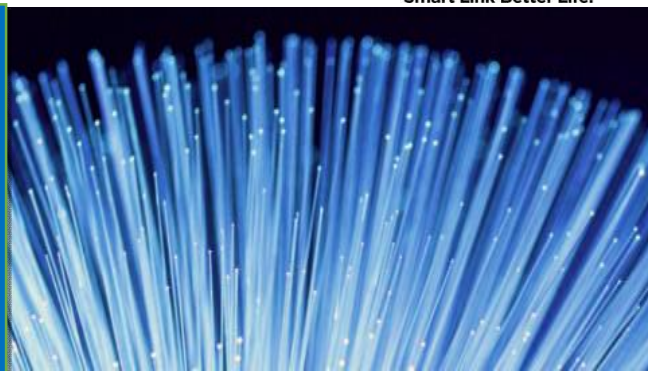# Indoor Cable

Product

1   Product Description

Micro fiber indoor cable uses several Ø250μm colored fiber as optical communication medium, the colored fiber wrapped with a layer of aramid yarn as strength member units, and the cable is completed with a jacket.

2   Requirements

2.1 Function requirements

Indoor any purpose cable distribution;

Routing and patching for data center and indoor communication network location.

2.2 Design and test criteria
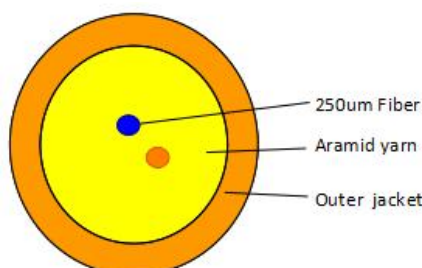
Comply with standard IEC 60794, IEC 60793;

2.3 Structure requirements

2.3.1   Structure parameters

Items		Specification	
Fiber count		2	
Optical fiber	Diameter(±5μm)	250	
	Color	1. Blue 2. Orange	
Cable	Core reinforce	Aramid yarn	
	Sheath material	PVC(OFNR)	
	Color	Yellow for single mode fiber; Orange for multi mode fiber; *Or other color available upon request*	
	Out diameter(±0.15mm)	1.6	2.0
	Cable weight(kg/km)	Approx. 2.4	Approx. 3.0

2.3.2 Construction

2.3.3 Optical properties

Table 2. Single-mode

Fiber type		Single-mode G652D (1310/1550nm)	Single-mode G657A1 (1310/1550nm)	Single-mode G657A2 (1310/1550nm)
Attenuation	Typical	0.36/0.22	0.36/0.22	0.36/0.22
	Maximum	0.5/0.4	0.5/0.4	0.5/0.4
Zero Dispersion Slope		≤0.091 ps/km·nm^2	≤0.092 ps/km·nm^2	≤0.092 ps/km·nm^2
Dispersion(1285~1340nm)		-3.5 – 3.5ps/(nm·km)	-3.5 – 3.5ps/(nm·km)	-3.5 – 3.5ps/(nm·km)
Mode field Diameter(@1310nm)		9.1±0.4 μm	8.8±0.4 μm	8.8±0.4 μm
Cutoff wavelength cable(nm)		≤1260 nm	≤1260 nm	≤1260 nm
Min bend radius(mm)		16 mm	10 mm	7.5 mm
Cladding diameter(μm)		125±1.0	125±1.0	125±1.0

Table 3. Multi-mode

Fiber type		Multi -mode (50/125μm) (850/1300nm)	Multi -mode BIOM3 (850/1300nm)	Multi -mode BIOM4 (850/1300nm)
Attenuation(dB)	Typical	3.0/1.0	3.0/1.0	3.0/1.0
	Maximum	3.5/1.5	3.5/1.5	3.5/1.5
Bandwidth(MHz·km)		≥500/≥500	≥1500/≥500	≥3500/≥500
Effective modal bandwidth		----/----	≥2000/----	≥4700/----
10 Gigabit Ethernet SX (M)		----	≤300/----	≤550/----
Min bend radius(mm)		30	7.5	7.5
Cladding diameter(μm)		125±1.0	125±1.0	125±1.0

MFCC-R7A0-_-0A00-1V_-002

Table 4. Multi-mode

Fiber type		Multi -mode OM5 (850/953nm/1300nm)
Attenuation	Typical	3.0/----/1.0
	Maximum	3.5/----/1.5
Bandwidth	@850nm	≥3500 MHz·km
	@953nm	≥1850 MHz·km
	@1300nm	≥500 MHz·km
Effective modal bandwidth	@850nm	≥4700 MHz·km
	@953nm	≥2470 MHz·km
40GBASE-SR4/100GBASE-SR10	@850nm	200M
Min bend radius		7.5 mm
Cladding diameter(μm)		125±1.0

Other optical properties should meet international standards of IEC 60793/IEC60794 or ITU-T.

2.4 Properties Requirements

2.4.1   Mechanical properties

Mechanical properties	Installation	Operation
Tensile strength	80N	30N
Min bend radius(D: Cable diameter)	20D	10D

The mechanical properties of other optical fibers and cables shall meet international standards of IEC 60794.

2.4.2   Environmental characteristics

Transportation temperature	0°C~+60°C
Storage temperature	0°C~+60°C
Installation temperature	0°C~+60°C
Operation temperature	0°C~+60°C

2.5 Cable environmental requirement

Our products are in compliance with current RoHS. Please inform us detailed information if the products need to meet other laws, regulations and standards.

2.6 Other Requirements

2.6.1 Length

Recommended Reel Length：2000M；

Other lengths available upon request.

2.6.2 Marking

Unless otherwise specified, the cable sheath marking shall be in accordance with follows:

Color: Black (if the cable jacket is black, the marking color is White).

For example :　Cable type: SXCC-G3CZ-1.6-0A00-1VY-001B1.3

　　　　　　　Marking :　YOFC　SH　SXCC-G3CZ-1.6-0A00-1VY-001B1.3　　****M

"****M" mean metric marking

2.6.3 Ordering information

MFCC-R7A0-□-0A00-1Z□-002□

　　　　　　　1　　　　2　　　3

1 Cable diameter

1.6

2.0

2 Select cable color

Y=Yellow

O=Orange

A=Aqua

Other color available upon request

3 Select fiber type

B6a1=G657A1

B6a2=G657A2

A1=50/125μm

BIOM3=Bend Insensitive

　　　-Maxband OM3

BIOM4= Bend Insensitive

　　　-Maxband OM4

OM5= Bend Insensitive

　　　-Maxband OM5