

## 2/4 Core Single Mode FTTH Drop Cable - Outdoor

### Ⓜ Application

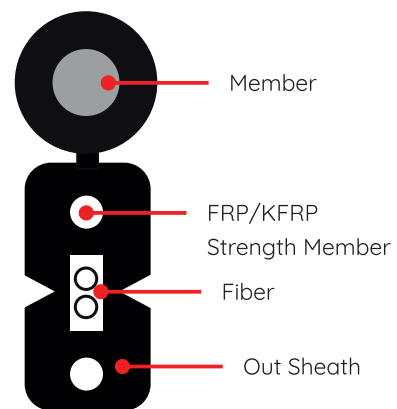
- Can be used in outdoor applications
- Can be used as access building cable
- Can be used as aerial drop cable

### Ⓜ Characteristics

- Good mechanical and environmental features
- Flame retardant features meet the requirements of relevant standards
- The mechanical features meet the relevant standards
- Soft, flexible, easy to lay and splice, with big capacity data transmission
- Meet the requirements of the market and customers

### Specifications

Items	Parameter
Cladding Non-Circularity	≤1.0%
Primary Coating Diameter	250±15µm
Coating - Cladding Concentricity Error	≤12.5µ
Cable Weight	21.7kg/km
Cable Diameter	5.3 x 2.0 MM
Range Temperature	-30+70°C
Fiber Type	G657A, G657B or G652D



### Standards

ITU.T G.652D / G.657A/B

IEC 60332-1-2, IEC 60754-1,2 & IEC 61034-2

# Specifications

Fiber Style	Conditions	Specified Values	Units
<b>Optical Characteristics ITU-G.657A1</b>			
Attenuation	1310nm	≤0.35	[dB/km]
	1383nm(after H <sub>2</sub> aging)	≤0.35	[dB/km]
	1460nm	≤0.25	[dB/km]
	1550nm	≤0.21	[dB/km]
	1625nm	≤0.23	[dB/km]
Attenuation vs. Wavelength Max. a Diffence	1285-1330nm, in reference to 1310nm	≤0.03	[dB/km]
	1525-1575m, in reference to 1550nm	≤0.02	[dB/km]
Dispersion Coefficient	1285-1340nm	-3.5 to 3.5	[ps/nm.km]
	1550nm	≤18	[ps/nm.km]
	1625nm	≤22	[ps/nm.km]
Zero Dispersion Wavelength ( $\lambda_0$ )	--	1300-1324	[nm]
Zero Dispersion Slope ( $\delta_0$ )	--	≤0.092	[ps/nm.km]
Typical Value	--	0.086	[ps/nm.km]
Maximum Individual Fiber	--	≤0.1	[ps/√km]
PMD Link Design Value (M=20, Q=0.01%)	--	≤0.06	[ps/√km]
	Typical Value	--	0.04
Cable Cutoff wavelength ( $\lambda_{cc}$ )	--	≤1260	[nm]
Mode Field Diameter (MFD)	1310nm	8.4 - 9.2	[μm]
	1310nm	8.4 - 9.2	[μm]
	1550nm	9.3 - 10.3	[μm]
Effective Goup Index of Refractorion ( $N_{eff}$ )	1310nm	1.466	-
	1550nm	1.467	-
Point Discontinuties	1310nm	≤ 0.05	[dB]
	1550nm	≤ 0.05	[dB]

## Geometric Characteristics

Characteristic	Condition	Specified Value	Unit
Cladding diameter	-	125.0 ± 0.7	µm
Cladding Non-circularity	-	≤0.7	%
Coating diameter	-	235 - 245	µm
Coating-Cladding concentricity error	-	≤12.0	µm
Coating Non-circularity	-	≤6.0	%
Core-Cladding concentricity error	-	≤0.5	µm
Curl(radius)	-	≥4	m
Delivery Length	-	Upto 50.4	km/reel

## Environmental Characteristics

Fiber Style	Conditions	Specified Values	Units
<b>1310nm, 1550nm &amp; 1625nm</b>			
Temperature Dependence Induced Attenuation	-60°C to +85°C	≤0.5	dB/km
Temperature-Humidity Cycling Induced Attenuation	-10°C to +85°C, 98% RH	≤0.5	dB/km
Watersoak Dependence Induced Attenuation	23°C for 30 Days	≤0.5	dB/km
Damp Heat Dependence Induced Attenuation	85°C and 85% RH, for 30 Days	≤0.5	dB/km
Dry Heat Aging	85°C for 30 Days	≤0.5	dB/km

## Mechanical Specifications

Fiber Style	Conditions	Specified Values	Units	
Proof Test	-	≥9.0	[N]	
	-	≥1.0	[%]	
	-	≥100	[kpsi]	
Macro-bend Induced Loss	10 Turns Around a Mandrel of 15 mm Radius	1550 nm	≤0.25	[dB]
	10 Turns Around a Mandrel of 15 mm Radius	1625 nm	≤1.0	[dB]
	1 Turns Around a Mandrel of 10 mm Radius	1550 nm	≤0.75	[dB]
	1 Turns Around a Mandrel of 10 mm Radius	1625 nm	≤1.5	[dB]
Coating Strip Force	Typical Average Force	1.5	[N]	
	peak force	1.3-8.9	[N]	
Dynamic Fatigue Parameter ( $n_d$ )	-	≥20	-	

## Color Code of the Fibre

Each fiber can be identifiable throughout the length of the drop wire cable in accordance with the following color sequence (in accordance with EIA/TIA-598-A).

### Fibre Colors

No.	1	2	3	4
Color	<b>Blue</b>	<b>Orange</b>	<b>Green</b>	<b>Brown</b>

## Technical Parameters

Cores	OD (nm)	Tensile Strength		Crush Resistance (N/100MM)	
		Short-Term	Long-Term	Short-Term	Long-Term
2 Core	5.3 x 2.0 (±0.2mm)	600	400	2000	1000
4 Core	5.3 x 2.0 (±0.2mm)	600	400	2000	1000

## Ordering Information

Part Number	Product Description
RF2-02FTSMOD-LZ	2 Core FTTH Outdoor Drop Cable, 09/125um Single mode, LSZH Sheath
RF2-04FTSMOD-LZ	4 Core FTTH Outdoor Drop Cable, 09/125um Single mode, LSZH Sheath