

# FTTH CABLE PRODUCT

FTTX Strand Drop Wire Flat



## FIBER TO THE HOME AERIAL CABLE (SELF SUPPORT FTTH)

FTTH Cable directly connected to their homes, their bandwidth, wavelength and transmission technology type are not restricted. The optical fiber unit is positioned in the centre. Two parallel strength member are placed at the two sides. A steel wire as the additional strength member is also applied, then, the cable is completed with a black HDPE sheath.

## CHARACTERISTIC

- Good mechanical and environmental characteristic
- Anti-UV characteristics meet the requirements of relevant standards
- The mechanical characteristics meet the requirements of relevant standards
- Soft, flexible, easy to lay and splice, and with big capacity data transmission
- Meet various requirements of market and clients
- Two FRP strength member protects the fiber with tensile strength
- Low Smoke Zero Halogen (LSZH) outer jacket

## APPLICATION

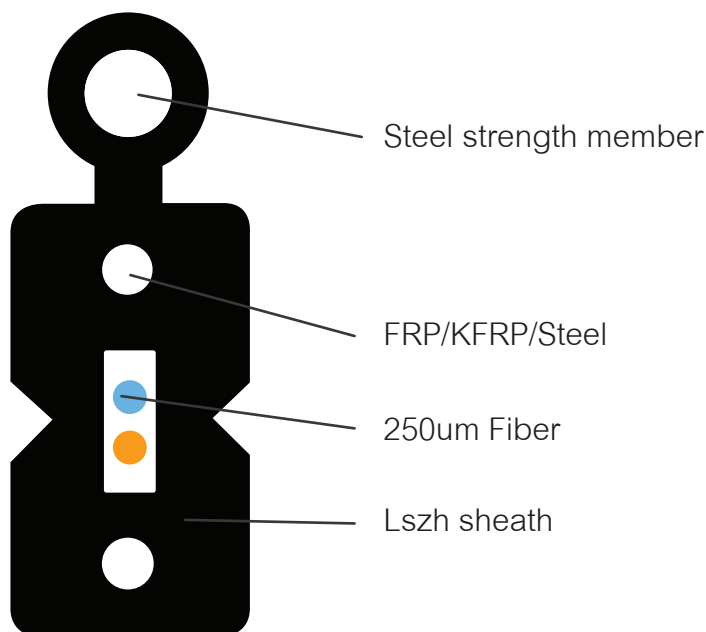
- Adopted to outdoor level and vertical distribution.
- Suitable for connect with communication equipment.
- Long distance and local area network communication.

## STANDARD

ANSI/TIA-568-C.3, ANSI/TIA/EIA-568-B.3, ISO/IEC 11801:2002, ANSI/ICEA 696, Telcordia (Bellcore) GR-20-CORE, ITU-T G.657A1/G.657A2 (Singlemode), ITU-T G.651 (Multimode), IEC 60332-1, IEC 60332-2 & IEC 60332-3, IEC 60793/60794, ANSI/ICEA 596, EIA/TIA-455, UL, RoHS Compliant 2002/95/EC, IEEE802.3z, IEEE802.3ae, IEEE802.3(LAN, EthernetFast Ethernet, Gigabit Ethernet and 10Gigabit Ethernet 40-100 Gbps)



F-FTTX-SDF-XX



## CABLE CONSTRUCTION DETAILS

Number of fiber		1~6core
Cable weight	Material	Galvanized steel wire/FRP/KFRP
	diameter	2*(0.5~0.8)mm
Messenger sheath thickness	Material	Galvanized steel wire
	diameter	1.0mm
Cable sheath thickness	Material	LSZH
	diameter	1.8±0.2mm
Cable size (Height * width)		2.0(±0.1) mm × 5.2(±0.2)mm
Outer sheath		Max. 0.8mm/Min. 0.4mm
Self support Messenger wire		0.5~0.7mm
strength member	1~2core	18.2KG
	4~6core	18.5KG

## FIBER CHARACTERISTIC

Fiber style	Unit	SM G657	SM G657D	MM 50/125	MM 62.5/125	MM OM3-300
condition	nm	1310/1550	1310/1550	850/1300	850/1300	850/1300
attenuation	dB/km	≤ 0.36/0.23	≤ 0.34/0.22	≤ ≤3.0/1.0	≤3.0/1.0	≤3.0/1.0
Dispersion	1550nm 1625nm	Ps/(nm*km) Ps/(nm*km)	---- ≤18 ≤22	---- ----	---- ----	Dispersion ----
Bandwidth	850nm 1300nm	MHZ.KM MHZ.KM	---- ----	≥400 ≥800	≥160 ≥500	Dispersion
Zero dispersion wavelength	nm	1300-1324	≥1302, ≤1322	----	----	≥1295, ≤1320
Zero dispersion slope	nm	≤0.092	≤0.091	----	----	----
PMD Maximum Individual Fiber		≤0.2	≤0.2	----	----	≤0.11
PMD Maximum Individual Fiber	Ps/(nm <sup>2</sup> *km)	≤0.12	≤0.08	----	----	----
Fibre cutoff wavelength λ <sub>c</sub>	nm	≥1180, ≤1330	≥1180, ≤1330	----	----	----
Cable cutoff wavelength λ <sub>cc</sub>	nm	≤1260	≤1260	----	----	----
MFD	1310nm 1550nm	um um	9.2+/-0.4 10.4+/-0.8	9.2+/-0.4 10.4+/-0.8	---- ----	---- ----
Numerical Aperture(NA)		----	----	0.200+/-0.015	0.275+/-0.015	0.200+/-0.015
Step(mean of bidirectional measurement)	dB	≤0.05	≤0.05	≤0.10	≤0.10	≤0.10
Irregularities over fiber length and point	dB	≤0.05	≤0.05	≤0.10	≤0.10	≤0.10

Discontinuity						
Difference backscatter coefficient	dB/km	≤0.05	≤0.03	≤0.08	≤0.10	≤0.08
Attenuation uniformity	dB/km	≤0.01	≤0.01			
Core diameter	um			50+/-1.0	62.5+/-2.5	50+/-1.0
Cladding diameter	um	125.0+/-0.1	125.0+/-0.1	125.0+/-0.1	125.0+/-0.1	125.0+/-0.1
Cladding non-circularity	%	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0
Coating diameter	um	242+/-7	242+/-7	242+/-7	242+/-7	242+/-7
Coating/chaffinch concentricity error	um	≤12.0	≤12.0	≤12.0	≤12.0	≤12.0
Coating non circularity	%	≤6.0	≤6.0	≤6.0	≤6.0	≤6.0
Core/cladding concentricity error	um	≤0.6	≤0.6	≤1.5	≤1.5	≤1.5
Curl(radius)	um	≤4	≤4	----	----	----

## CABLE MECHANICAL CHARACTERISTIC

Items	Description	
Installation Temperature range	-20°C+60°C	
Operation and transport temperature	-40°C+70°C	
Min Bending Radius(mm)	Long term	15D
	short term	30D
Min allowable Tensile Strength(N)	Long term	300
	short term	600
Crush Load (N/100mm)	Long term	1000
	short term	2200

## ORDER INFORMATION

PRODUCT	PART NUMBER
FTTX Strand Drop Wire Flat 1 Core	F-FTTX-SDF-01
FTTX Strand Drop Wire Flat 2 Core	F-FTTX-SDF-02
FTTX Strand Drop Wire Flat 4 Core	F-FTTX-SDF-04