LanPlus

LanPlus 2F Drop Indoor

FRP. LSZH, White, 2000m

SKU: LP-2FI-FLW-2000

Product Description

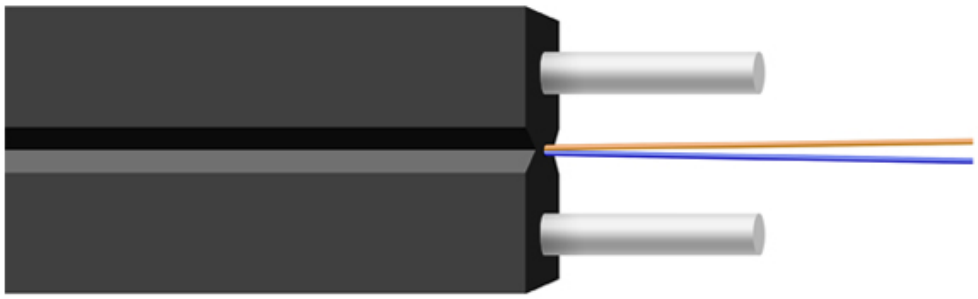
FTTH indoor cable, the optical fiber unit is positioned in the centre. Two parallel Fiber Reinforced Plastics (FRP) are placed at the two sides. Then the cable is completed with a black or color LSZH sheath.

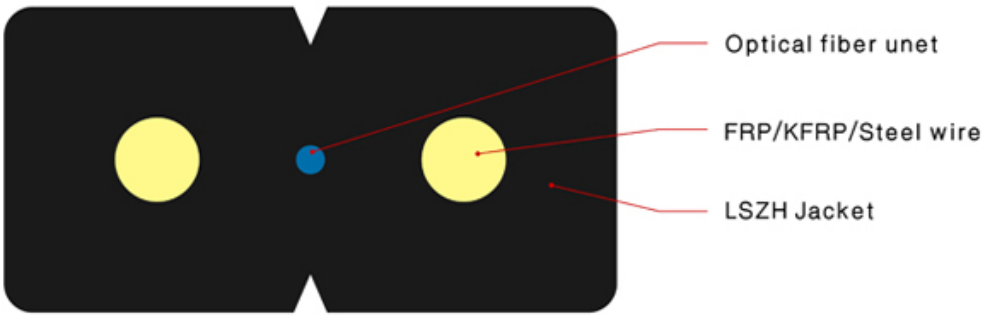
Product Features

- Special low-bend-sensitivity fiber provides high bandwidth and excellent communication transmission property
- Two parallel FRP strength members ensure good performance of crush resistance to protect the fiber
- Simple structure, light weight and high practicability
- Novel flute design, easily strip and splice, simplify the installation and maintenance
- Low smoke, zero halogen and flame retardant sheath

Product Standards

- Complies with Standard YD/T 1997-2009





Cable structure and parameters

No. of optical fiber			2
Optical Fiber Model			G.657A2
Strength member	Material		FRP
	Diameter（±0.03）mm		0.50
	No.		2pcs
Outer Sheath	Material		LSZH
	Color		Black
Cable size（±0.2）mm			2.0×3.0
Cable Weight（±1）kg/km			8
Allowable Tensile Strength	Short Term	N	200
	Long Term		100
Allowable Crush Resistance	Short Term	N/100mm	2200
	Long Term		1100
Min. bending radius	Without Tension		10×Cable- ϕ
	Under Maximum Tension		20×Cable- ϕ
Temperature range（℃）	Installation		-20~+60
	Transport&Storage		-40~+70
	Operation		-40~+70

The properties of single mode optical fiber (ITU-T Rec. G.657A2)

Characteristic	condition	data	unit
Optical properties			
Attenuation	1310nm 1383nm 1490mm 1550nm 1625nm	≤0.35 ≤0.35 ≤0.23 ≤0.25 ≤0.35	dB/km dB/km dB/km dB/km dB/km
Relative wavelength attenuation @1310nm @1550nm	 1285～1330nm 1525～1575nm	 ≤0.05 ≤0.05	 dB/km dB/km
Dispersion in the wavelength range of	1285～1340nm 1550nm	≤3.5 ≤18	ps/(nm.km) ps/(nm.km)
Zero dispersion wavelength		1300～1324	nm
A zero-dispersion slope		≤0.092	ps/(nm².km)
Polarization Mode Dispersion Coefficient PMD Single fiber maximum Fiber link value (M=20, Q=0.01%) Typical value		 ≤0.2 ≤0.1 0.04	ps/ ps/ ps/
Cable cut-off wavelength（λcc）		≤1260	nm
Mode field diameter （MFD）	1310nm 1550nm	8.8±0.4 9.8±0.5	μm μm
Attenuation discontinuities	1310nm 1550nm	≤0.05 ≤0.05	dB dB
Geometric characteristics			
Core diameter		125±0.7	μm
Cladding roundness		≤0.7	%
Coating diameter		245±5	μm
Coating / package concentricity error		≤12.0	μm
Core / package concentricity error		≤0.5	μm
The warpage (radius)		≥4	m
Environmental characteristics（1310nm、1550nm、1625nm）			
Temperature additional attenuation	-60℃ ～+85℃	≤0.05	dB/km
Temperature-humidity cycle additional attenuation	-10℃ ～+85℃，98% Relative humidity	≤0.05	dB/km
Flooding additional attenuation	23℃，30 days	≤0.05	dB/km
Hot and humid additional	85℃和 85% Relative	≤0.05	dB/km

attenuation	humidity，30 days		
Dry heat aging	85℃	≤0.05	dB/km
Mechanical properties			
Screening tension		≥9.0	N
The macro bend Additional attenuation 10 CircleΦ30mm 10 CircleΦ30mm 1 CircleΦ20mm 1 CircleΦ20mm	 1550nm 1625nm 1550nm 1625nm	 ≤0.025 ≤1.0 ≤0.75 ≤1.5	 dB dB dB dB
Coating peeling force	Typical average	1.5	N
Dynamic fatigue parameters		≥20	

Main mechanical & environmental performance test

Item	Test Method	Acceptance Condition
Tensile Strength IEC 794-1-2-E1	- Load: Short term tension - Length of cable: about 50m	- Fiber strain ≤ 0.36% - Loss change ≤ 0.1 dB @1550 nm - No fiber break and no sheath damage.
Crush Test IEC 60794-1-2-E3	- Load: Short term crush - Load time: 1min	- Loss change ≤ 0.05dB@1550nm - No fiber break and no sheath damage.
Impact Test IEC 60794-1-2-E4	- Points of impact: 3 - Times of per point: 1 - Impact energy: 5J	- Loss change ≤ 0.1dB@1550nm - No fiber break and no sheath damage.
Temperature Cycling Test YD/T901-2001-4.4.1	- Temperature step: +20°C→-40°C→+70°C →+20°C - Time per each step: 12 hrs - Number of cycle: 2	- Loss change ≤ 0.05 dB/km@1550 nm - No fiber break and no sheath damage.