

SINGLEMODE OPTICAL FIBRE

# FTTH UDD ADSS

(remote and peripheral load-bearing elements – dielectric)

TYPE OF FIBER CHARACTERISTICS

Low-loss high performance fiber SM

**Fiber used:**  
**Corning® SMF-28® Ultra fiber**

ITU-T G. 657 A1

OPTICAL CHARACTERISTICS

Wavelength attenuation	
850 nm	-
1300 nm	-
1310 nm	≤ 0,32 dB/km
1550 nm	≤ 0,18 dB/km
Mode field diameter	8,6-9,5 μm (1310 nm)
Cutoff wavelength	
λ <sub>c</sub> (OF – 2 m)	1190-1330 nm
λ <sub>cc</sub> (OF or OC – 22 m)	≤ 1260 nm
Chromatic dispersion	
1285 – 1330 nm	
1550 nm	≤ 18 pc/(nm·km)
1530 – 1565 nm	-
1525 – 1575 nm	
1625 nm	≤ 22 pc/(nm·km)
Band width	
λ = 850 nm	-
λ = 1300 nm	-
Wavelength range with zero variance value	1300 – 1324 nm
Maximum slope of dispersion curve at the point of its zero value	≤ 0,092 pc/(nm <sup>2</sup> ·km)
Polarization mode dispersion (PMD) 1550 nm	≤ 0,2 pc·km <sup>1/2</sup>
Numerical aperture (NA)	-

GEOMETRICAL CHARACTERISTICS

Non-circularity of core	-
Core diameter	-
Cladding diameter	125 ± 0,7 μm
Cladding Non-circularity	≤ 1,0 %
Excentricity	
- core / cladding	-
- mode field / cladding	≤ 0,5 μm
Coating diameter	245 ± 10 μm

MECHANICAL CHARACTERISTICS

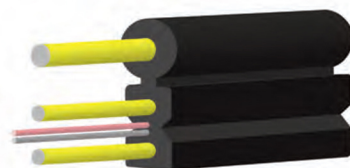
Strength test	≥ 1,0 % (0,69 hPa)
Radius of own bend	≥ 4,0 m
Macrobend losses:	
- radius of mandrel, mm	10 15
- number of coils, pc.	10 1
- Increase in attenuation, dB at wavelength	
1550 nm	0,25 0,75
1625 nm	1,0 1,5

ENVIRONMENTAL IMPACTS

Dependence of attenuation in the temperature range (-60...+85) °C at wavelength	
850 nm	-
1300 nm	-
1310 nm	≤ 0,05 dB/km
1550 nm	≤ 0,05 dB/km

AREA OF APPLICATION

Drop cable is designed for last-one-mile in the FTTx network, enhancing the accessibility to the fiber and maximizes the installation workability

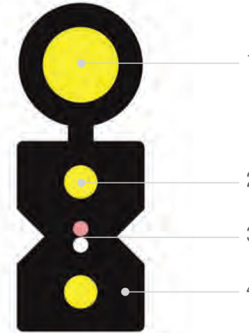


FEATURES

- 2 parallel peripheral strength members protecting the fibers ensure good performance of crush resistance
- Simple structure, small weight and high practicability
- Easy jacket removal without special tools
- Easily splice, simplify the installation and maintenance
- Environmental protection – Low smoke, zero halogen and flame retardant sheath
- Self-support structure

CABLE STRUCTURE

- 1 – Suspension member – Fiber reinforced plastic (FRP)
- 2 – Strength member – two FRP
- 3 – Singlemode optic fibers meet
- 4 – Outer sheath – LSZH



**Material of protective coating :** G.657 A1

singlemode optical fibre in accordance with recommendation of iTu-T g. 657 A1

OPERATING CHARACTERISTICS:

Quantity of optical fibres, pcs.	6
Cable diameter, mm	5,8 x 2,1
Cable weight, kg/km	25
Maximum allowed tensile force (short-term load), kN	0,7
Minimum bending radius, mm	20 x cable diameter
Maximum allowed crushing force, N/mm	500
Operation temperature range, °C	-40°C - +60°C
Storage temperature range, °C	-20°C - +60°C
Installation temperature range, °C	- 10°C - +60°C
Factory length, km	1,5

**International standard:**

**IEC60794; Telecordia gr-20; EN 50173; ISO/IEC 11801; ANSI/TIA - 588-C.3**