

Optical Fiber CABLE

TECHNICAL DATA SHEET

Single Mode 12 Core ASU Aerial Fiber Optic Cable – Self-Supporting Mini ADSS

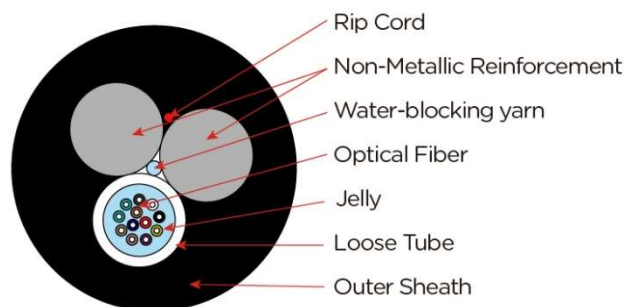


Single Mode 12 Core ASU Aerial Fiber Optic Cable – Self-Supporting Mini ADSS

Product Description:

The Single Mode 12 Core ASU Aerial Fiber Optic Cable is a self-supporting mini ADSS optical cable designed for aerial installation and long-distance communication applications.

The cable features a loose tube structure filled with water-resistant gel compound to protect the optical fibers. Water-blocking material is applied over the tube to provide additional protection against water penetration.



Two parallel Fiberglass Reinforced Plastic (FRP) elements are positioned on both sides of the cable as strength members, providing good tensile performance. The cable is protected by a single HDPE outer sheath with anti-UV properties.

The ASU Mini ADSS cable can be customized according to customer requirements, with available fiber counts from 2 to 24 cores.

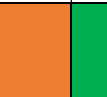
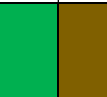
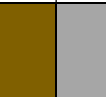
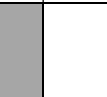
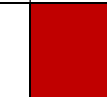
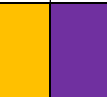
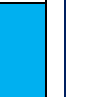
Cable Dimensions & Construction

Item	Description
Optical Fiber	Single Mode
Fiber Standard	G.652D
Fiber Count	12 Fibers
Structure	0+3
Central Strength Member	2 × Fiberglass Reinforced Plastic (FRP)
Loose Tube Material	PBT
Loose Tube Color	Natural
Number of Loose Tubes	1
Fibers per Tube	12
Outer Sheath Material	HDPE, Anti-UV
Outer Sheath Color	Black
Water-Blocking Material	Block Water Yarn
Stripping Method	1 × Rip Cord
Cable Diameter	7.0 mm ±5%
Maximum Span	120 m

Cable Construction

Component	Specification
Optical Fibers	12 × G.652D Single Mode
Loose Tube	PBT, natural color
Filling Compound	Water-resistant gel compound
Strength Members	2 × FRP
Water Blocking	Block Water Yarn
Rip Cord	1 × Rip Cord
Outer Sheath	HDPE, Anti-UV
Sheath Color	Black
Cable Structure	0+3

Fiber Color Identification

Fiber No.	1	2	3	4	5	6	7	8	9	10	11	12
Color												

Cable Features

- Small size and lightweight construction
- Self-supporting aerial cable design
- Two FRP strength members provide good tensile performance
- Loose tube structure for fiber protection
- Water-resistant gel compound inside the loose tube
- Water-blocking material for improved waterproof performance
- HDPE outer sheath with anti-UV properties
- Suitable for aerial installation
- Available in customized fiber counts
- Available fiber counts include 2, 4, 6, 8, 12, and up to 24 cores

Applications

According to the supplied source, the cable applications include:

- Vertical cabling
- FTTx indoor optical cable applications
- Fiber optic loop cabling
- On-premises data center access
- Aerial long-distance communication installations

Optical Fiber Specifications

Single Mode Fiber – G.652D

Parameter	Specification
Fiber Type	G.652D Single Mode
Operating Wavelength	1310 / 1550 nm
Attenuation – Typical	0.35 / 0.21 dB/km
Attenuation – Maximum	0.40 / 0.30 dB/km
Zero Dispersion Slope	$\leq 0.091 \text{ ps}/(\text{km} \cdot \text{nm}^2)$
Dispersion (1285–1340 nm)	-3.5 to +3.5 ps/(nm·km)
Mode Field Diameter @1310 nm	$9.1 \pm 0.4 \text{ } \mu\text{m}$
Cable Cutoff Wavelength	$\leq 1260 \text{ nm}$
Minimum Bend Radius	16 mm
Cladding Diameter	$125 \pm 1.0 \text{ } \mu\text{m}$

Attenuation – Available Single Mode Fiber Options

The supplied specification also lists alternative single-mode fiber types:

Parameter	G.652D	G.657A1	G.657A2	G.657B3
Wavelength	1310/1550 nm	1310/1550 nm	1310/1550 nm	1310/1550 nm
Typical Attenuation	0.35/0.21 dB/km	0.35/0.21 dB/km	0.35/0.21 dB/km	0.35/0.21 dB/km
Maximum Attenuation	0.40/0.30 dB/km	0.40/0.30 dB/km	0.40/0.30 dB/km	0.40/0.30 dB/km
Zero Dispersion Slope	≤ 0.091	≤ 0.092	≤ 0.092	≤ 0.092 ps/(km·nm ²)
Mode Field Diameter @1310 nm	9.1±0.4 μm	8.8±0.4 μm	8.8±0.4 μm	8.6±0.4 μm
Cable Cutoff Wavelength	≤ 1260 nm	≤ 1260 nm	≤ 1260 nm	≤ 1260 nm
Minimum Bend Radius	16 mm	10 mm	7.5 mm	5 mm
Cladding Diameter	125±1.0 μm	125±1.0 μm	125±1.0 μm	125±1.0 μm