

ASU Fiber Cable Mini ADSS 24 Core

Variants

9mm 100 SPAN

Details

The **24 Core ASU Outdoor Optical Fiber Cable** is a self-supporting outdoor aerial fiber optic cable designed for **FTTH, FTTx, ISP access networks, telecom distribution, enterprise backbone, CCTV fiber networks, and rural broadband deployment.**

This ASU cable uses **ITU-T G.652D single mode optical fiber**, dual FRP strength members, PBT loose tube, filling compound water-blocking protection, aramid yarn reinforcement, and black PE outer sheath. It is suitable for **100 meter and 150 meter span outdoor aerial installation.**

Fiber Count

24 Core

Fiber Type

G.652D

Span

100M / 150M

Cable Diameter

9.0mm

Key Features

? 24 Core ITU-T G.652D Single Mode Fiber

? Self-Supporting ASU Outdoor Aerial Cable Design

? Suitable for 100M / 150M Span Installation

? Dual FRP Strength Member for Mechanical Support

? PBT Loose Tube with Filling Compound

? Aramid Yarn Reinforcement for Tensile Strength

? Black PE Outer Sheath for Outdoor Protection

? Low Attenuation for Long-Distance Optical Transmission

Fiber and Loose Tube Color Code

| No. | Color | No. | Color |
|-----|-------|-----|-------|
| 1 | Blue | 7 | Red |

| No. | Color | No. | Color |
|-----|---------|-----|--------|
| 2 | Orange | 8 | Black |
| 3 | Green | 9 | Yellow |
| 4 | Brown | 10 | Violet |
| 5 | Grey | 11 | Pink |
| 6 | Natural | 12 | Aqua |

ASU Structure and Specification Details

| Parameter | Specification |
|-----------------------------|--------------------------|
| No. of Fibers | 24 |
| Fiber Type | G.652D Single Mode Fiber |
| Span | 100M / 150M |
| Strength Member | FRP, Diameter: 2.3mm x 2 |
| Loose Tube | PBT, Diameter: 2.1mm |
| Water Blocking Layer | Filling Compound |
| Aramid Yarn | 14 x 1670 Dtex |
| Outer Sheath | PE, Black |
| Cable Diameter | 9.0mm ±0.2mm |
| Attenuation @1310nm | ? 0.35 dB/km |

| Parameter | Specification |
|--|--|
| Attenuation @1550nm | ? 0.21 dB/km |
| Ice Thickness | 10mm |
| Wind Speed | 20 m/s |
| Crush Resistance | Short / Long: ?1000 / ?300 N/100mm |
| Minimum Bending Radius | No Tension: 10× Cable Diameter / Max Tension: 20× Cable Diameter |
| Installation Temperature | -20°C to +60°C |
| Transport & Storage Temperature | -40°C to +70°C |

Note: Mechanical sizes are nominal values and may vary slightly based on production and customer requirements.

Main Technical Specification of Optical Fiber (G.652D)

| Category | Description | Before Cable |
|-------------|-------------|--------------|
| Attenuation | @1310nm | ?0.35 dB/km |
| Attenuation | @1383nm | ?0.35 dB/km |
| Attenuation | @1550nm | ?0.20 dB/km |
| Attenuation | @1625nm | ?0.24 dB/km |

| Category | Description | Before Cable |
|----------------------------|--------------------------------|-----------------|
| Attenuation Discontinuity | - | ?0.05 dB |
| Attenuation vs. Wavelength | @1285–1330nm / @1525–1575nm | ?0.05 dB/km |
| Zero Dispersion Wavelength | - | 1300–1324 nm |
| Zero Dispersion Slope | - | ?0.092 ps/(nm |
| Dispersion | @1310nm / @1550nm | ?3.5 / ?18 ps/n |
| PMD | Polarization Mode Dispersion | ?0.2 ps/?km |
| Cutoff Wavelength | ?cc | ?1260 nm |
| Effective Group Index | @1310nm / @1550nm | 1.4675 / 1.468 |
| Macro Bend Loss | 30mm radius, 100 turns @1625nm | ?0.1 dB |

Geometrical Specifications

| Parameter | Value |
|--|---------------|
| Mode Field Diameter @1310nm | 9.2 ± 0.6 ?m |
| Mode Field Diameter @1550nm | 10.4 ± 0.8 ?m |
| Cladding Diameter | 125 ± 1 ?m |
| Cladding Non-Circularity | ?1.0% |

| Parameter | Value |
|---|------------|
| Coating Diameter | 245 ± 7 μm |
| Coating / Cladding Concentricity Error | ±8 μm |
| Core / Cladding Concentricity Error | ±0.8 μm |

Mechanical Specifications

| | |
|---------------------------------|-------------|
| Proof Test Level | ±1.0% |
| Fiber Curl Radius | ±4.0 m |
| Peak Coating Strip Force | 1.3 – 8.9 N |

Packing and Marking

| Item | Description |
|--------------------------------|---|
| Standard Packing Length | 5km per wooden drum |
| Packing Length Option | As per customer requirement |
| Drum Marking | As per customer requirement / standard drum marking |

Applications

FTTH Outdoor Network

ISP Access Network

Telecom Distribution Network

Aerial Fiber Deployment

Enterprise Fiber Backbone

CCTV Fiber Network

Rural Broadband Network

Utility Fiber Communication

Why Choose D-TECH ASU Fiber Cable?

D-TECH supplies high-quality outdoor optical fiber cables for ISPs, telecom operators, government projects, hydropower projects, CCTV networks, and enterprise fiber deployments across Nepal. Our ASU cables are selected for low transmission loss, stable outdoor performance, and reliable aerial installation.