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FIBER OPTICS

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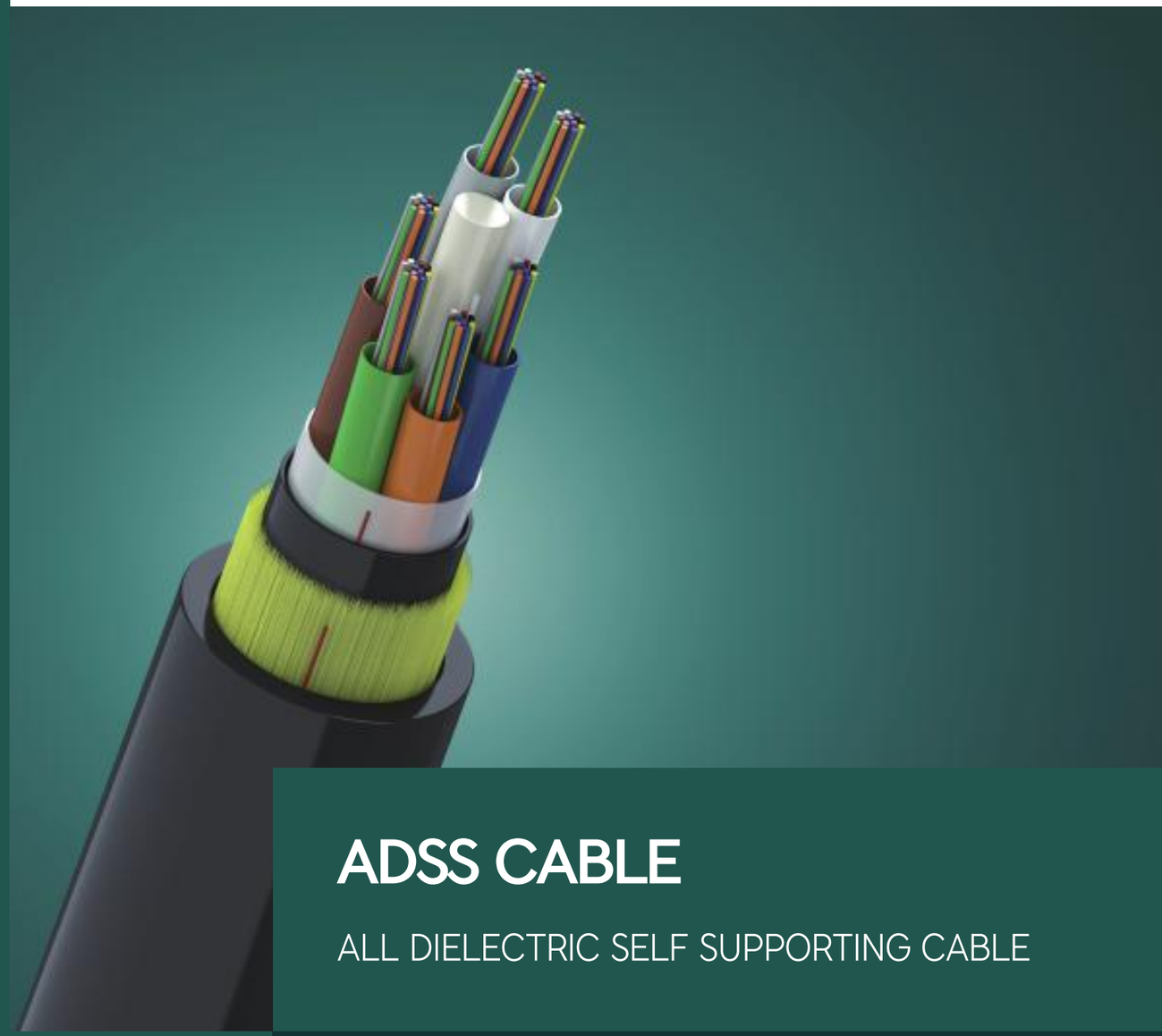


ADSS CABLE

ALL DIELECTRIC SELF SUPPORTING CABLE

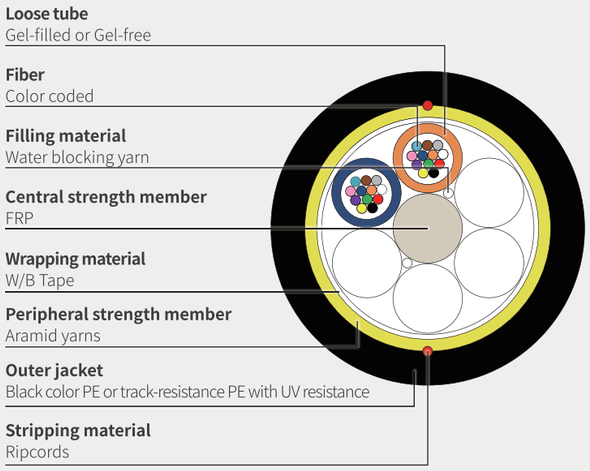
Reliability in Aerial Communication Networks

Taihan Fiberoptics offers an extensive selection of self-supporting fiber optic cables used in pole-to-pole networks, overhead transmission lines and distribution lines as an excellent solution for aerial networks with outstanding optical performance, durability and reliability.

All our prototypes are designed and manufactured to operate under the required environmental conditions and to endure the external forces, sucks as wind, ice and extreme temperatures to which they might be exposed to during their lifetime.

ADSS cables have become the number one choice for ISPs and Power Utilities for network expansion due to its faster deployment and reduced installation cost.

ADSS SHORT SPAN CABLE



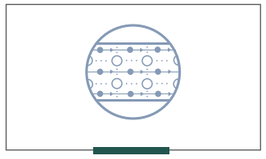
Description

ADSS Short SPAN Cable is an excellent self-supporting solution for aerial pole-to-pole application with spans of up to 400 meters. The cable design can be customized to adapt to required application in accordance with various installation and operation conditions guaranteeing its optimal performance during the lifetime. The optical fibers are color coated and embedded in gel-filled or gel-free flexible buffer tubes which provide more efficient cable preparation, mid-entry and easy closure arrangement. The cable core is enclosed with innovative dry water repellent materials and high modulus aramid yarn to withstand the external weather forces and conditions. Polyethylene is applied as an outer jacket finishing, providing the cable with outstanding mechanical performance, durability and reliability in its application during lifetime.

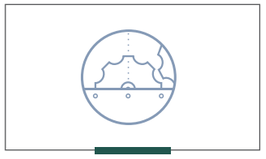
Applications

- Pole-to-pole aerial Installations
- FTTx Networks
- Enterprise OSP Networks
- Electric Utility Distribution Power Lines
- Can be applied in duct installations

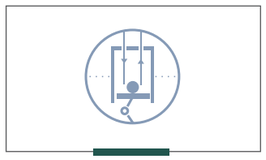
Features



All-Dielectric
No effect to electric lines



Robust Design
Durable Performance



Easy to handle
Flexible & Light weight

Fast Installation
One-step installation

- **Robust and Durable Design**
- **Fast, Easy Installation**
- **Easily removable outer jacket**
- **Availability of up to 432 fiber counts**
- **Lightweight and small O.D. design available**
- **All gel-free designs available**
- **24F/LT available to reduce O.D. and weight (36F/LT available to reduce O.D. and weight)**

Standards & Certifications

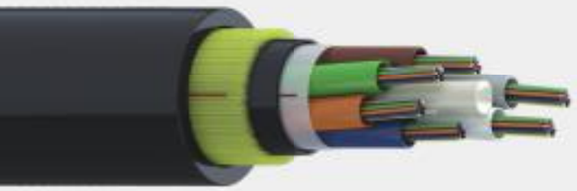
[ITU-T G.650. 652. 655. 657] [IEC 60793] [TIA-598] [IEC 60794-4-20] [IEEE 1222] [ISO 9001, 14001] [OHSAS 18001] [ANSI/ICEA S-87-640] [Telcodia GR-20] [RUS 7 CFR 1755]

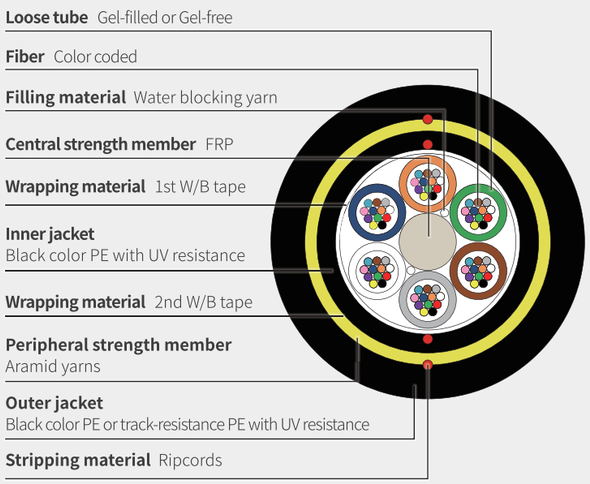
Physical Characteristics					
Fiber Count	12~60	72	96	144	144
No. of Fiber Per Tube	12	12	12	12	24
NominalDiameter (mm)	11.2 (0.441 inch)	11.8 (0.465 inch)	13.4 (0.528 inch)	16.9 (0.665 inch)	12.7 (0.500 inch)
Nominal Weight (kg/km)	92 (62 lbs/1,000'ft)	107 (72 lbs/1,000'ft)	135 (91 lbs/1,000'ft)	211 (142 lbs/1,000'ft)	124 (83 lbs/1,000'ft)

Mechanical and Environmental Characteristics					
NESC Conditions / Span	NESC Light 1100FT / Medium 800FT / Heavy 500FT				
Initial Sag	1.5 %				
Initial tension (kg)	258 (569 lbs)	298 (657 lbs)	376 (829 lbs)	587 (1296 lbs)	346 (765 lbs)
Maximum allowable tension (kg)	633 (1,396 lbs)	677 (1,493 lbs)	707 (1,559 lbs)	951 (2,097 lbs)	664 (1,464 lbs)
Minimum Bending radius	20 x cable outer diameter (With load)				
Temperature range	Storage -40°C to +70°C [-40°F to +158°F] / Installation -30°C to +60°C [-22F°Fto +140°F] / Operation -40°C to +70°C [-40°F to +158°F]				

▶ All Specification Can Be Customized

ADSS LONG SPAN CABLE





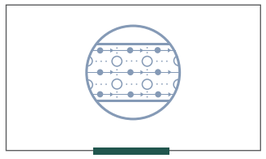
Description

ADSS Long SPAN cable is an excellent self-supporting solution for aerial transmission and distribution networks with spans of up to 1,800 meters. The ADSS cables can be designed and customized for their application to satisfy required installation and operation conditions, guaranteeing its optimal performance during their lifetime. The optical fibers are embedded within color coded flexible buffer tubes which provide efficient cable preparation and easy closure arrangements. The cable core is enclosed with innovative dry water repellent materials and it's covered by the first polyethylene sheath. High modulus aramid yarns are applied over the first sheath to withstand the external weather forces and conditions. In the final stage, the second polyethylene sheath is applied to further provide the cable with outstanding optical performance, durability, reliability in its application and lifetime.

Applications

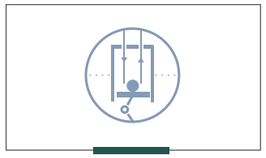
- Transmission or Distribution Aerial Installations
- Long Spans, Long-range Crossings
- Enterprise OSP Networks
- Electric Field Potentials below 12kV and up to 25 kV
- FTTx Networks
- Can be applied in duct installations

Features



All-Dielectric
No effect to electric lines

Robust Design
Durable Performance



Easy to handle
Flexible & Light weight

Fast Installation
One-step installation

- **Robust and Durable Design**
- **Fast, Easy Installation**
- **Easily removable outer jacket**
- **Availability of up to 288 fiber counts**
- **Broad range of fiber types**
- **Excellent Long Span Capability**
- **Customize designs as per requirement**
- **Tracking improved resistance optional**
- **24F/LT available to reduce O.D. and weight (36F/LT available to reduce O.D. and weight)**

Standards & Certifications

[ITU-T G.650. 652. 655. 657] [IEC 60793] [TIA-598] [IEC 60794-4-20] [IEEE 1222] [ISO 9001, 14001] [OHSAS 18001] [ANSI/ICEA S-87-640] [Telcodia GR-20] [RUS 7 CFR 1755]

Physical Characteristics				
Fiber Count	12~60	72	96	144
No. of Fiber Per Tube	12	12	12	12
Nominal Diameter (mm)	13.5 (0.531 inch)	13.9 (0.547 inch)	15.8 (0.622 inch)	19.8 (0.780 inch)
Nominal Weight (kg/km)	137 (92 lbs/1,000'ft)	148 (99 lbs/1,000'ft)	189 (127 lbs/1,000'ft)	298 (200 lbs/1,000'ft)

Mechanical and Environmental Characteristics				
NESC Conditions / Span	NESC Light 1500FT / Medium 1300FT / Heavy 900FT			
Initial Sag	1.0%			
Initial tension (kg)	781 (1,722 lbs)	846 (1,867 lbs)	1,081 (2,384 lbs)	1,704 (3,758 lbs)
Maximum allowable tension(kg)	1,259 (2,776 lbs)	1,308 (2,884 lbs)	1,643 (3,624 lbs)	2,644 (5,830 lbs)
Minimum Bending radius	20 x cable outer diameter (With load)			
Temperature range	Storage -40°C to +70°C [-40°F to +158°F] / Installation -30°C to +60°C [-22F°Fto +140°F] / Operation -40°C to +70°C [-40°F to +158°F]			

▶ All Specification Can Be Customized

Fiber Grade

Fiber	ANYWAVE LL	ANYWAVE D	ANYWAVE D	ANYWAVE D	ANYWAVE 200	ANYWAVE FLEX A2	ANYWAVE FLEX B3	ANYWAVE REACH C	ANYWAVE REACH AL	ANYWAVE REACH AS
Fiber Category	G.652.D	G.652.D	G.652.D	G.652.D	G.652.D	G.657.A2	G.657.B3	G.655.C	G.655.A	G.655.A
Performance Grade	LL	1	2	3	2	2	2	4	5	6
Wavelength (nm)	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550	1310/1383/1550
Maximum Attenuation (dB/km)	0.34/0.34/0.22	0.35/0.35/0.21	0.35/0.35/0.25	0.40/0.40/0.30	0.35/0.35/0.25	0.35/0.35/0.25	0.35/0.35/0.25	- / - /0.25	- / - /0.25	- / - /0.25
Typical Attenuation (dB/km)	0.33/0.33/0.19	-	-	-	-	-	-	- / - /0.22	- / - /0.22	- / - /0.22

Design Ordering Check List

Maximum Span Length	_____ ☐ Feet ☐ Meters
Installation Sag	_____ %
Weather Loading	NESC ☐ Light ☐ Medium ☐ Heavy Other : _____ Wind Load _____ Ice Load _____ Temperature
Cable Construction	☐ Single Jacket ☐ Double Jacket
Test Standard	☐ IEEE ☐ IEC
Installation Infrastructure	☐ Telecom Poles ☐ Distribution Line ☐ Transmission Line
Outer Sheath	☐ Polyethylene ☐ Tracking Improved Polyethylene
No.of fibers	_____ #
Fiber Type and Grade	
Fibers Configuration	☐ 6F/LT ☐ 12F/LT ☐ 24F/LT ☐ Other _____ .
Other : Max. Sag Under Max. Operation Loading	_____ %
Length Sequential Marking	☐ Feet ☐ Meter

GLOBAL LEADING COMPANY IN FIBER OPTICS