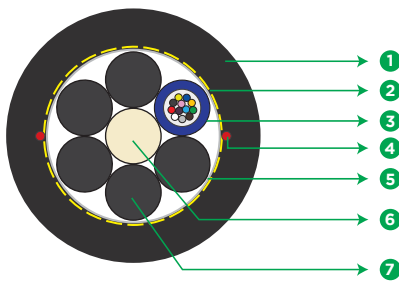
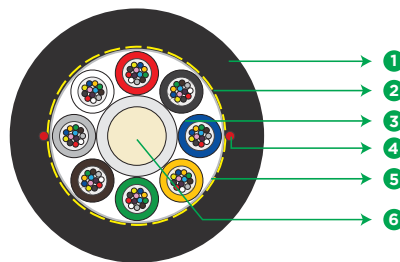


# Aerial Lite

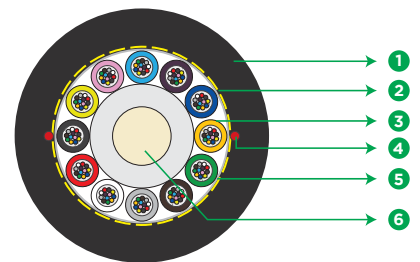
Multitube Gel Free Single Sheath OFC  
Single Mode Fiber



**6 Elements**



**8 Elements**



**12 Elements**

**1 OUTER JACKET**

**3 GEL FREE LOOSE TUBE**

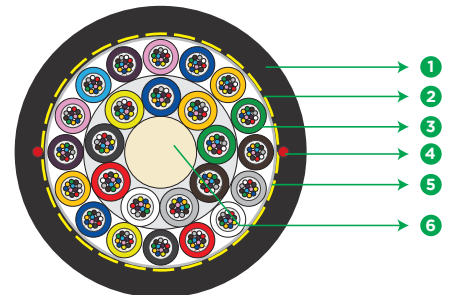
**5 WATER BLOCKING TAPE**

**7 FILLER**

**2 ARAMID YARN**

**4 RIPCORDS**

**6 STRENGTH MEMBER**



**24 Elements**

*\* Typical Construction Diagram - Not to Scale*

## Features & Benefits

- This cable can be designed to suit specific requirements of span length, wind speed and other loading conditions
- Dry water-blocking technology for gel free core helps in quicker end preparation
- Easily removable rugged thermoplastic jacket
- Flexible, light weight, easy to handle & install
- Tensile and crush resistant

## Product Details

STL AERIAL-LITE Gel Free Multi-tube Single Jacket ADSS Cables are smaller in diameter and lighter in weight that enables them to be installed aerially in moderate field conditions. This cable is a stranded loose tube cable with optical Fibers placed inside robust buffer tubes stranded around a Fiber reinforced plastic (FRP) central strength member. In addition to optical Fibers, the buffer tubes contain water-swellaable yarns, and the cable core is surrounded with water-swellaable tape to prevent water ingress in the interstices of cable core. High strength yarns are distributed over the core to provide the required tensile strength for aerial self-supporting applications.

## Cable Performance Standards

Cable complies with the following standards IEC 60793, IEC 60794, Telcordia GR-20, IEEE, ITU-T, RoHS, and REACH.

## Printing Details

Printing: STL SM NOVA “FIBER COUNT” AERIAL OFC LASER SYMBOL TELEPHONE SYMBOL “YEAR OF MANUFACTURE” “LENGTH CODE” “FEET MARKING”

**Note:** The accuracy of marking shall be + 0.5%. Occasional loss of printing & remarking shall be as per Bell core GR 20 and this supersedes the earlier markings.

## Specifications

Physical Characteristics	
Fiber Type	STL NOVA (ITU-T G.657A1)
Maximum Cabled Attenuation (dB/km)	1310nm : 0.35 & 1550nm : 0.25
PMD LDV (ps/sqrt.km)	≤ 0.1
Fibers per Tube	12
Central Strength Member	FRP (Fiber Reinforced Plastic)
Peripheral Strength Members	High Strength Aramid Yarns
Core Wrapping	Binder and water swellable tape
No. of Ripcords Below Outer Sheath	2
Outer Sheath Material	UV Proof Black Polyethylene

Fiber Color Sequence (AS per EIA/TIA 598C)											
Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua

Cable Characteristics							
Product Code	Fiber Count	No. of Tubes	Tube Color Sequence	No. of Fillers	Cable Diameter mm (inch) (±5%)	Cable Weight Kg/Km (lbs./ft.) (± 10%)	
AA0012FSN01TFP1USH100M	12	1	Blue, Filler, Filler, Filler, Filler, Filler	5	11.4 (0.448)	90	(0.060)
AA0024FSN02TFP1USH100M	24	2	Blue, Orange, Filler, Filler, Filler, Filler	4	11.4 (0.448)	92	(0.061)
AA0036FSN03TFP1USH100M	36	3	Blue, Orange, Green, Filler, Filler, Filler	3	11.4 (0.448)	92	(0.061)
AA0048FSN04TFP1USH100M	48	4	Blue, Orange, Green, Brown, Filler, Filler	2	11.4 (0.448)	95	(0.063)
AA0072FSN06TFP1USH100M	72	6	Blue, Orange, Green, Brown, Slate, White	0	11.4 (0.448)	95	(0.063)
AA0096FSN08TFP1USH100M	96	8	Blue, Orange, Green, Brown, Slate, White, Red, Black	0	13.4 (0.527)	142	(0.907)
AA0144FSN12TFP1USH100M	144	12	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua	0	16.6 (0.653)	205	(0.137)
AA0288FSN24TFP1USH100M	288	24	Layer 1 : Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Layer 2: Violet, Rose, Aqua, Blue#, Orange#, Green#, Brown#, Slate#, White#, Red#, Black#, Yellow#, Violet#, Rose#, Aqua#	0	19.2 (0.755)	260	(0.174)

## Specifications

Mechanical & Environmental Characteristics		
Cable Characteristics	Cable Performance	Testing Standard
Tensile Strength (N)	As mentioned in below tables	ICEA 640 FOTP-33
Crush Resistance (N/cm) (lbf/in)	200 (114.20)	ICEA 640 FOTP-41
Impact Strength (Nm) (lbf.in)	5 (44.25)	ICEA 640 FOTP-25
Torsion	±180°	ICEA 640 FOTP-85
Min. Bend Radius (During Installation)	20 D	ICEA 640 FOTP-88
Min. Bend Radius (After Installation)	15 D	ICEA 640 FOTP-88
Water Penetration Test	1m waterhead, 3m samples, 24 h	ICEA 640 FOTP-82
Temperature Performance	Max. change in attenuation shall be ≤ 0.15 dB/km	ICEA 640 FOTP-3
Installation	-30°C to +70°C	
Operation	-40°C to +70°C	
Storage	-40°C to +70°C	

**Note:** All tests shall be carried out as per IEC standards. Change in attenuation after and before testing shall be ≤ 0.05 dB/km for Single Mode Fiber.

Loading Conditions						
12-72 Fiber Count						
Operating Condition	Span Length(m)	Installation Sag	Ice Load (mm)	Wind Speed (Km/hr)	Max. Installation Tension (N)	Max. Allowable Tension (N)
NESCHavy	100	1 %	12.7	64	11 80	4880
96 Fiber Count						
Operating Condition	Span Length(m)	Installation Sag	Ice Load (mm)	Wind Speed (Km/hr)	Max. Installation Tension (N)	Max. Allowable Tension (N)
NESC Heavy	100	1%	12.7	64	16 60	6200
144 Fiber Count						
Operating Condition	Span Length(m)	Installation Sag	Ice Load (mm)	Wind Speed (Km/hr)	Max. Installation Tension (N)	Max. Allowable Tension (N)
NESC Heavy	100	1%	12.7	64	2500	7550
288 Fiber Count						
Operating Condition	Span Length(m)	Installation Sag	Ice Load (mm)	Wind Speed (Km/hr)	Max. Installation Tension (N)	Max. Allowable Tension (N)
NESC Heavy	100	1%	12.7	64	3250	9600

**Note :** Other Span and loading conditions are also available upon request.

## Packing and Lengths

Drum Type	Length Multiple (in feet)	Tolerance	Short Lengths
Wooden Drums	13,123; 20,000 ± 5% (For all Fiber counts)	-0%, +5%	Max 5%, Customer Approval

**For additional information please contact your sales representative.**

You can also visit our website at [www.stl.tech](http://www.stl.tech)

The information given herein, including drawings, illustrations and schematics are intended for illustration purposes only and is believed to be reliable. However, STL makes no warranties to its accuracy or completeness and disclaims any liability in connection with its use. STL obligations shall be only set forth in STL standard terms and conditions of the sale and in no case, STL be liable for any incidental, indirect or consequential damages arising out of sale, resale, use or misuse of the product. Users of STL products should make their own evaluation to determine the suitability of such each product for the specific application.