

# MULTITUBE AERIAL OPTICAL CABLE

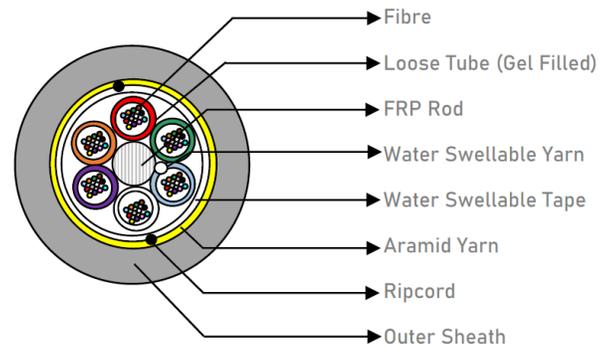
Part Number: ADSS-xFG657A1-200x

## Description

Multitube Aerial Optical Cable

## Key Features

- Optical Fibre containing elements laid up around central strength member
- Water blocked loose tubes
- Water blocked core interstices
- Aramid yarn as peripheral strength member
- Polyethylene sheath as outer protection



## Applications

- Aerial network

## Standards

- IEC 60793
- ANSI/ICEA-S-87-640
- Telcordia GR-20
- ITU-T
- RoHS
- REACH

## Product Specifications

### Cable Construction

Parameter	Structure/Layout/Material		
Fibre Count	12F/24F/36F/48F/72F	96F	144F
Number of fibres per tube	12		
Number of loose tubes – PBT	1/2/3/4/6	8	12
Number of Fillers – HDPE Black	5/4/3/2/0	0	
Central Strength Member	FRP Rod	FRP Rod PE Upcoated	
Moisture Barrier	Water swellable yarn & water swellable tape		

Peripheral Strength Member – Aramid Yarn	Over WS Tape		
Outer Sheath	HDPE – Black – UV Proof		
Number of Ripcords	2 - Polyester		
Cable Diameter	10.5 ± 0.5 mm	12.0 ± 0.5 mm	15.0 ± 1.0 mm
Cable Weight	85 ± 10 kg/km	110 ± 10 kg/km	175 ± 20 kg/km

### Colour Coding

Fiber Colour EIA/TIA 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
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Loose Tube Colour EIA/TIA 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
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Loose tube Colour EIA/TIA 598	Bl	Or	Gr	Br	Sl	Wh	Rd	Bk	Yl	Vi	Pk	Aq
Tracer Mark	Bl	Or	Gr									

### Cable & Fibre Characteristics

Tensile Strength (max)	12F	24F/36F/48F	72F	96F	144F	IEC-60794-1-21-E1
	3500 N	4000 N	4500 N	5000 N	6000 N	
Crush Resistance	2000 N/10 cm					IEC-60794-1-21-E3
Impact Strength	10 N.m					IEC-60794-1-21-E4
Torsion	±180°					IEC-60794-1-21-E7
Minimum Bend Radius	20 x D					IEC-60794-1-21-E11
Water Penetration Test	1 m water head, 3 m sample, 24 hours					IEC-60794-1-21-F5
Environmental Performance	Installation		-10 °C to + 60 °C			IEC-60794-1-22-F1
	Operation		-40 °C to + 70 °C			
	Storage		-40 °C to + 70 °C			

Span	80-160 m
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Fibre Type	G.657A1	
Attenuation	1310 nm	≤ 0.36 dB/km
	1550 nm	≤ 0.22 dB/km

Chromatic Dispersion	1285-1330 nm		≤ 3.5 ps/nm.km	
	1550 nm		≤ 18 ps/nm.km	
	1625 nm		≤ 22 ps/nm.km	
PMD (Max. Individual)	≤ 0.15 ps/√ km			
PMD (Link design value)	≤ 0.06 ps/√ km			
Cable cut off wavelength λ <sub>cc</sub>	≤ 1260 nm			
MFD	1310 nm		9.1 ± 0.3 μm	
	1550 nm		10.3 ± 0.5 μm	
Bending Induced Attenuation	1 Turn	∅ 20	1550 nm	≤ 0.75 dB
			1625 nm	≤ 1.5 dB
	10 Turn	∅ 30	1550 nm	≤ 0.25 dB
			1625 nm	≤ 1.0 dB
Core-Cladding Concentricity Error	≤ 0.5 μm			
Cladding Diameter	125 ± 0.7 μm			
Cladding Non Circularity	≤ 0.8 %			
Primary Coating Diameter (Uncoloured)	242 ± 5 μm			

## Cable Length

Cable Length	4.0 km ± 5%
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