

Tactical Armored Fibre Optic Cable

Product Details

Sterlite Tech™ Field Deployable Tactical Cables are intended for military communications, remote control links and operation in severe environments and wide temperature range. The construction is of Central Stainless steel loose tube with fibres reinforced with stainless steel wires and sheathed with nylon black. This cable is compatible with most military grade as well as with standard commercial type connectors.

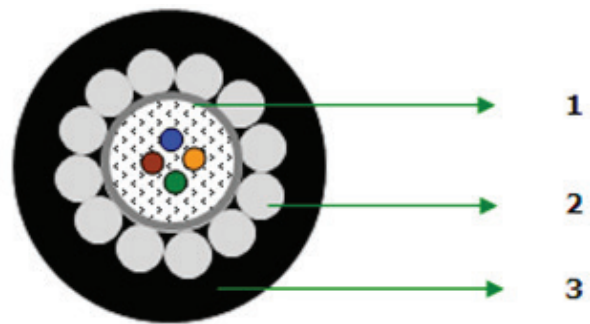
Product Application

These cables are specifically designed for extreme environmental conditions- temperature, humidity, ice, fungus, and fluid immersion. They can be used for battlefield, tactical, defense and military or civil applications. They can be rapidly deployed in harsh environment.

Features & Benefits

- Available in 4 fibre count in either single-mode or multi-mode optical fibres
- These cables are designed with a rugged, crush resistant, durable jacket for superior flexibility and abrasion resistance across a wide temperature range,
- Light weight fibre optic cables used for deployment in military applications, electronic news gathering, outdoor broadcast, tactical security and mobile applications.
- High tensile stainless steel wires and with outer PA sheath provides high crush resistance and high permissible tensile performance while maintaining good flexibility
- Total solution package contains connectorized cables field carrying and deploying solution tools
- Tightly controlled physical parameters.
- Combination of fibre types available on request

Typical Construction of Cable



1. STAINLESS STEEL TUBE WITH FIBRES & GEL
2. STAINLESS STEEL WIRES
3. OUTER SHEATH



Defense



Water Blocked



High Crush



UV Protected



Performance Standards

Cable complies to the following main Standards IEC.60794 series, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T Recommendations, GR-409, JSS 6020-02: 2008,

Specifications

Physical Characteristics				
Fibre Count		4		
Nominal Cable Diameter (mm) ± 0.5mm		3.8		
Nominal Cable Weight (kg/km) ± 10%		25		
Mechanical and Environmental Characteristics*				
Test	Standard / Notes	Product Performance		
Max. Tensile Strength (N)	IIEC-60794-1-21-E1	900		
Bending Radius	IEC-60794-1-21-E11	Dynamic = 10cm, Static = 4.6cm		
Crush Resistance (N/100mm)	IEC-60794-1-21-E3	10000		
Breaking Load (N)	IEC-60794-1-21-E4	> 3500		
Torsion	IEC-60794-1-21-E7	± 180°		
Drip Test	IEC-60794-1-21-E14	30 cm, 70°C, 24 hr		
Temperature Cycling	IEC-60794-1-22-F1	Installation: -10°C to +40°C	Operation: -10°C to +40°C	Storage: -30°C to +70°C
Water Penetration	IEC-60794-1-22-F5B	1m water head, 3m samples, 24 hrs no water leakage		

** After the test, the change in attenuation shall be < 0.05 dB/km. No damage or crack on cable & no fibre break.

Cabled Optical Fibres Characteristics

The optical fibres are in accordance to the specifications ITU-T G.652D and ITU-T G.657A1. Refer to specific data sheets for details.

Transmission Characteristics						
Fibre Type	Attenuation coefficient, dB/km (Average/Maximum)			PMD, ps/√km	PMD LDV, ps/√km	Cut-off Wavelength (λ _{cc}), nm 1310nm
	1310nm	1550nm	1625nm			
G652D** fibre	≤ 0,4	≤ 0,3	≤ 0,4	≤ 0,20	≤ 0,1	≤ 1260
G657A1 fibre	≤ 0,4	≤ 0,3	≤ 0,4	≤ 0,20	≤ 0,1	≤ 1260

** This fibre is also available as a bend insensitive (Sterlite Tech's NOVA fibre)

Fibre Standard Colour Code

1	2	3	4	5	6	7	8	9	10	11	12
Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

Packing and Lengths (As per EIA/TIA 598)

Packing: Wooden drums with protection

Lengths (tolerance $\pm$ 5%): 500, 1000, 2000 mtrs

Note - Customised drum lengths available on request.

Sheath printing details

STERLITE < Fibre Type ><Fibre Count><Product Type ><OFC Laser Symbol ><Telephone Symbol ><Month & Year of Production><Cable ID>< Meter Marking>

