

Military Distribution Series Fibre Optic Cable



Military tactical distribution series cable is the ideal cable solution for applications where the ability to deploy, retrieve and redeploy fibre cable is essential. Mil-tac cable is a flexible, lightweight and rugged cable design with excellent mechanical and environmental protection characteristics.



The quality and performance of the cable makes it perfectly suited to military, broadcast, port and rail fibre networks. Available in singlemode, OM1, OM3 & OM4 multimode fibre

KEY FEATURES

- Flame retardant, halogen free thermoplastic polyurethane jacket
- Perfectly suited to deployable and harsh environment installations High performance components and construction
- Complies with relevant ITU & IEC standards & specifications
- High strength to weight ratio allows for easy handling
- Aramid yarn strength member
- 900um buffer eliminates the need for costly and time consuming fanout kits or pigtail splices because connectors terminate directly to the fibre
- Cable materials are indoor/ outdoor – UV, water and fungus resistant
- Wide operating temperature range of -20°C to +70°C & excellent installation temperature range of -10°C to +60°C
- 2 to 24 fibres

Applications

- Suitable for indoor/outdoor confined spaces
- Military & defence network deployment
- Broadcast HD TV cameras
- Minesite and oil rig networks
- Port and rail temporary connections



Fibre Performance

Fibre type	OM1	OM3 (G651)	OM4 (G651)	SM (G652.D)
Attenuation at 850nm (dB/km)	≤ 3.5	≤ 3.0	≤ 3.0	n/a
Attenuation at 1300/1310nm (dB/km)	≤ 1.0	≤ 1.0	≤ 1.0	≤ 0.40
Attenuation at 1550nm (dB/km)	n/a	n/a	n/a	≤ 0.30
Bandwidth at 850nm (MHz.km)	≥ 200	≥ 1500	≥ 3500	n/a
Bandwidth at 1300nm (MHz.km)	≥ 600	≥ 500	≥ 500	n/a



Technical Specifications

Temperature cycle (Δ dB)	20 to -20 to 70 to -20 to 70 to 20 12 hours ($^{\circ}$ C)	≤ 0.2	≤ 0.2	(IEC 60794-1-2-F1)
Tensile attenuation (Δ dB)	Installation & operational loads	≤ 0.2	≤ 0.2	(IEC 60794-1-2-E1)
Bending attenuation (Δ dB)	6 turns, r 15xD	≤ 0.2	≤ 0.2	(IEC 60794-1-2-E11A)
Torsion attenuation (Δ dB)	5 cycles ($\pm 180^{\circ}$) 40 N, 2m	≤ 0.2	≤ 0.2	(IEC 60794-1-2-E7)
Crush attenuation (Δ dB)	1200 N/100mm, 5 min	≤ 0.2	≤ 0.2	(IEC 60794-1-2-E3)
Impact attenuation (Δ dB)	12J, 3 points, 1 impact	≤ 0.2	≤ 0.2	(IEC 60794-1-2-E4)
Water penetration	1m head, 3m cable, 24 hours	Nil leakage of water		(IEC 60794-1-2-F5)

Cable Characteristics

Fibre Count	Nominal diameter (mm)	Nominal weight (kg/km)	Installation tensile load (N)	Operational tensile load (N)	Min. bend radius (cm)
2	4.8	18	600	300	7
4	5.1	22	700	350	7.5
6	5.5	25	800	400	8.0
8	6.5	32	900	450	9.5
12	7.2	39	1000	500	10.0
24	9.0	67	1100	550	13.0

NSW - Silverwater
 Unit 4, 52 Holker Street
 Silverwater NSW 2128
 E: sales@opticalsolutions.com.au
 P: +61 2 9395 1400
 F: +61 2 9647 0014

NSW - Sydney City
 Unit 10, 10 Bradford Street
 Alexandria NSW 2015
 E: sydcity@opticalsolutions.com.au
 P: +61 2 9304 4555
 F: +61 2 9700 8055

VIC
 Unit 3 / 1 Rocklea Drive
 Port Melbourne VIC 3207
 E: vicsales@opticalsolutions.com.au
 P: +61 3 9646 4166
 F: +61 3 9646 4155

QLD
 Unit 2/ 40 Borthwick Ave
 Murarrie QLD 4172
 E: gldsales@opticalsolutions.com.au
 P: +61 7 3399 5280
 F: +61 7 3399 9805

ACT
 22 Isa Street
 Fyshwick ACT 2609
 E: actsales@opticalsolutions.com.au
 P: +61 2 6162 4600
 F: +61 2 6162 4605

WA
 28a Teddington Rd
 Burswood WA 6100
 E: wasales@opticalsolutions.com.au
 P: +61 8 9361 7000
 F: +61 8 9361 7011