

DSMO Pre-Terminated Outdoor Optical Cable w/ ODVA Connectors

DSMO is a highly weather-resistant military-grade outdoor optical cable, wound up on a portable drum, terminated with waterproof Type IP67 connectors.

Features

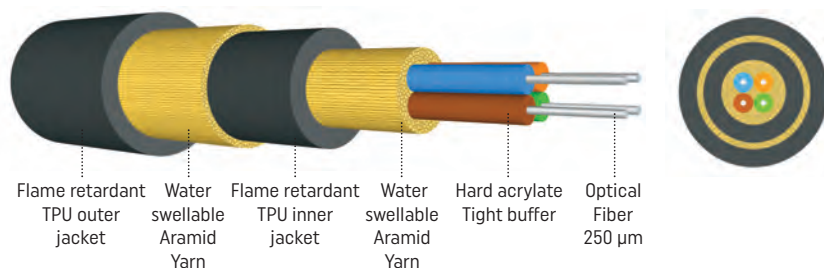
- Double-sheathed outdoor military-type cable type with PUR outer sheet, providing high resistance against oils, petrol and acids
- Version 2, 4, 8 and 12 optical fibers type Multimode 62, 5/125 μm , 50/125 μm and Singlemode 9/125 μm
- Portable weather-resistant Schill cable drum configured to accommodate the required length of cable
- Standard industrial optical ODVA, endurance IP67 with LC duplex connectors
- Other possibilities for terminations align to customer requirements, such as LC, SC, E2000, ST, etc.
- Custom-made solution according to client's needs



Applications

- Mobile studio trucks for radio and television transmissions
- HDTV camera systems
- Sound and television equipment inter-connection during cultural events and broadcasting
- BTS mobile radio stations for temporary radio signal coverage
- Spare mobile connection or mobile optical connection replacement for industrial applications and datacenters
- Inter-connection of laboratory and industrial equipment, apparatus or installations operating in adverse conditions (water, mud, heat, cold...)
- Army field application

Structure of the 4-fiber durable double-sheathed military-type optical cable



Cable Termination at Drum Side

- **Optical Connectors ODVA:** socket (female), protection IP67 with cover is mounted on the panel on the side of the drum.
- **Optical Adapters:** type LC duplex, SC, E2000, ST are mounted on a panel on the side of the drum. Adapters are protected by covers.

Cable Termination at End/Loss Side

1. **Standard Optical Box:** 6 x ODVA sockets (for 12 fibers), IP67 protection, weatherproof side outputs, white cover. Dimensions: width 140 mm with connectors, height 75 mm, length 340 mm with cable gland.
2. **Heavy Optical Box:** 6 x ODVA sockets (for 12 fibers), IP67 protection, weatherproof top outputs, black cover. Dimensions: width 150 mm with connectors, height 60 mm, length 435 mm with cable gland.



3. **Optical Connector ODVA:** ODVA is a robust optical connector for connecting two optical fibers with a plug and IP67 protection with a cover, which is suitable for safe connection in harsh outdoor environments. For multi-fiber cables, it is possible, at client request, to apply additional ODVA connectors, one for each pair of fibers, instead of an optical box.

ODVA Optical Connector

Parameters	Units	Specifications		
		Min	Type	Max
Insertion Loss (singlemode fiber)	dB		0.2	0.5
Insertion Loss (multimode fiber)	dB		0.2	0.5
Return Loss (singlemode fiber)	dB		55	
Operating Temperature	°C	-40		+70
IP rating			IP67	
Pull force	N			450
Material			UV resistant	
Industrial standard ODVA			IEC60603-7	

Outdoor Mobile Optical Pre-Terminated Cable w/ ODVA

Parameters	Unit	Specifications
Optical Fibers		2 / 4 / 8 / 12
Fiber Type		OS1 / OM1 / OM2
Strength members		Water-swellable Aramid Yarn
Outer Sheath		UV-stable, flame-retardant thermoplastic polyurethane with outstanding hydrolysis resistance, low temperature flexibility and high resistance to micro-organisms
Max. attenuation MMF@850 nm	dB/km	3.5
Max. attenuation MMF@1300 nm	dB/km	1.5
Max. attenuation SMF @1310 nm	dB/km	0.4
Max. attenuation SMF @1550 nm	dB/km	0.3
Tensile strength (EN 60794-1-2-E1)	N	2200
Max. compressive loading (EN 60794-1-2-E3)	N	4500
Max. Impact loading (EN 60794-1-2-E4)	J	15
Cable outer diameter	mm	7.1
Sheath thickness	mm	1.0
Min. bend radius not loaded (EN 60794-1-2-E11)	OD	10
Min. bend radius load (EN 60794-1-2-E11)	OD	20
Operating temperature range	°C	-40 to +85
Installation temperature range	°C	-20 to +50
Storage temperature range (EN 60794-1-22-F1)	°C	-40 to +85
Cable weight	kg/km	43
Class of fire reaction (EN 13501-6)		Fca



Standard Reels: Typical Models by Fiber Count & Cable Length*

Number of Fibers	Cable Length						
	100 m	150 m	200 m	250 m	300 m	400 m	500 m
2	GT 235	GT 235	GT 310	GT 310	GT 310	GT 380	GT 380
4	GT 235	GT 310	GT 310	GT 310	GT 310	GT 380	GT 380
8	GT 310	GT 310	GT 310	GT 380	GT 380	GT 450	GT 450
12	GT 310	GT 380	GT 380	GT 450	GT 450	GT 485	GT 485

ORDERING CODES

DSMO: Pre-Terminated Outdoor Optical Cable w/ ODVA Connectors

DS	MO	-	✓	-	✓	-	✓	-	???	-	✓	-	?																		
														Loss Side Connection																	
														O									ODVA Connector								
														S														Standard Box w/ ODVA Adapters			
														H															Heavy Box w/ ODVA Adapters		
														C															Customer Specified*		
																			Fiber Type												
														S															OM1 Singlemode 0.9/125 µm		
														M																OM2 Multimode 62.5/125 µm	
														P																OM2 Multimode 50/125 µm	
																			Number of Fibers												
														2															2		
														4																4	
														8																8	
														12																12	
																			150											Cable Length (m)	
																			Drum Side Connector Type												
														LC																LC Duplex Adapter	
														SC																	SC Adapters
														OD																	ODVA Adapters
														E2																	E2000 Adapters
														ST																	ST Adapters
																			Cable Reel Type												
														GT 380																Standard (Specify from Chart)	
														C																	Customized Specified*

Example

DS	MO	-	S	-	S	-	4	-	150	-	LC	GT 380	INTELDAT outdoor cable on drum, standard box with ODVA adapters, singlemode 0.9/125 µm cable, 4 fibers, 150 m length, LC Duplex adapters drum-side, GT 380 reel		
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*Contact Us for preferred connection types and cable reel specifications.