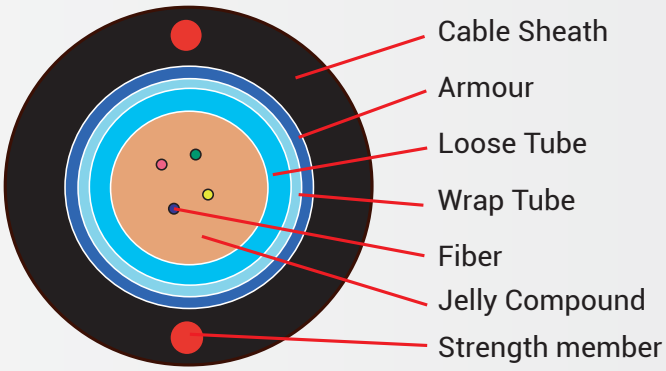
Optical Fiber Cable

Outdoor Armoured Central Loose Tube

Optical Fiber Cable are widely used nowadays to transmit data as light pulses through thin strands of glass or plastic. The Optical Fiber offers high speed data transmission, high bandwidth and immunity to electromagnetic interference, making them ideal for telecommunication and networking medium.

The Fiber Optic Cable comes in various design and construction, depending on area, location and site condition of where the Fiber Optic Cable will be installed. Most common cable design deployed in Malaysia are Duct/Underground Fiber Optic Cable, Aerial IB Fiber Optic Cable, Aerial ADSS Fiber Optic Cable, Anti-Rodent Cable (Steel Tape Armoring), OPGW Cable, etc.



This datasheet provide details design and specification for Litech's Optical Fiber Cable Outdoor Armoured Central Loose Tube.

Structure and Material Specification		
Strength Member	Material Diameter	Steel Wire 1.4mm
Loose Tube	Material Out Dia	PBT Refer table below
Wrap Tape	Material Thickness	Water Proof Tape 0.2 mm
Protection	Anti-rodent	
Armoured	Material Thickness	Corrugated Steel Tape Steel Tape 0.15 Each Side PE 0.15
Outer Sheath	Material	PE/LSZH

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Mechanical / Electrical / Environment Characteristic		
Tensile	Short Term Long Term	1500N 600N
Crush	Short Term Long Term	1000N/10cm 300N/10cm
Bending Radius	Installing Installed	30* Cable Diameter 10* Cable Diameter
Spark Voltage of Sheath	15kv DC for 2 minutes after 24 hours water immersion	
Insulating Resistance of Sheath	2000M after 24 hours water immersion	
Water Penetration	Correspond To IEC794-3	
Moisture Resistant Jelly	+ 70, No jelly will be flooded	
Temperature	Storage : -20°C ~ +60°C Operation : -5°C ~ +40°C	

Transmission Parameters Of Fibres					
Parameter	Unit	Singlemode Fibre		Multimode Fibre	
		G.652D	G.655	G.651	G.651
				50/125	62.5/125
Attenuation					
850 nm	dB/km			3.0	3.5
1310 nm		<=0.36		1.0	1.5
1383 nm		<=0.36	<=2.1		
1550 nm		<=0.22	<=0.22		
1625 nm		<=0.25	<=0.25		
Chromatic dispersion					
1288~1339 nm	ps/nm·km	<=3.5			
1550 nm		<=18			
1530~1565 nm			1.0 to 6.0		
1565~1625 nm			4.5 to 11.2		
Bandwidth					
850 nm	MHz·km			>=200	>=160
1310 nm				>=500	>=500
PMD					
Individual Fibre Link Value	ps/km$1^{/2}$	<=0.2 <=0.1	<=0.1 <=0.04		
Cut off wavelength (in cable)	nM	<=1260	<=1480		

Geometrical Parameters Of Fibres					
Parameter	Unit	Singlemode Fibre		Multimode Fibre	
		G.652D	G.655	G.651	G.651
				50/125	62.5/125
Mode field diameter at wavelength					
1310 Nm	μm	9.2±0.4			
1550 Nm	μm	10.4±0.8	9.2~10.0		
Mode Field Noncircularity	μm	<=0.5	<=0.5		
Core Diameter	μm			50±2	62.5±2
Cladding Diameter	μm	125±1.0		125±2.0	
Cladding Ellipticity	%	<=1		<=2	
Coating / Cladding Concentricity	μm	<=12			
Coating / Cladding Concentricity	μm	<=0.5		<=3.0	
Primary Coating Diameter	%	<=1.0		<=2.0	
Numerical Aperture	μm	245±5			
Curl	m	>=4			

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Application

Item	Value
Operation temperature	-40 ºC～+70 ºC
Installation temperature	-40 ºC～+70 ºC
Storage temperature	-40 ºC～+70 ºC
Static bending radius	12.5 times the cable diameter
Dynamic bending radius	25 times the cable diameter

Ordering Information

Part Number	Fiber Count	Loose Tube Dia. /mm	Steel Wire Dia. /mm	Sheath Thickness (mm)	Cable Outer Dia.	Weight kg/km
LTOC-CB-XX08C-04	4	3.0	1.4	3.0	10.8	137
LTOC-CB-XX08C-06	6	3.0	1.4	2.0	10.8	137
LTOC-CB-XX08C-08	8	3.0	1.4	2.0	10.8	137
LTOC-CB-XX08C-12	12	3.0	1.4	2.0	10.8	137

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LITECH is constantly pushing the limits of fiber optic telecommunications technology by introducing innovative concepts and making ground-breaking advancements that inspire significant human progress.

Our R&D teams push the extra miles to come out with applicable and innovative solutions to suits our customer's network . It is our passion and dedication to identify the next opportunity and realize a better tomorrow.

