



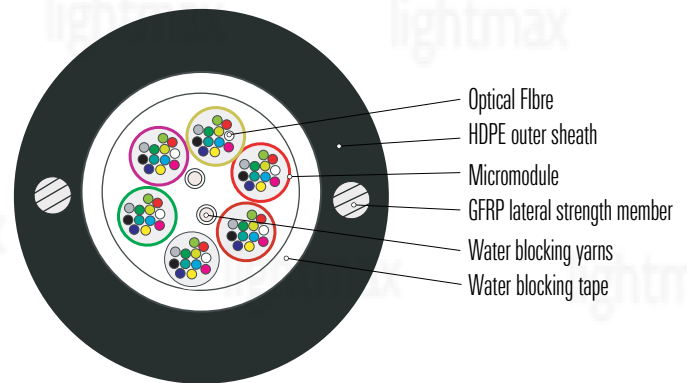
Micromodule Optical Cable

Duct Outdoor | 6^(*) & 12 fibres per μmodule
6^(*) - 12 - 24 - 36 - 48 - 72 - 96 - 144 fibres | HDPE
G.652.D & G.657.A2 SM Fibre

The *LightMax*[®] optical micromodule cable with HDPE sheath is suitable for outdoor duct installations. The micromodules containing the fibres are filled with gel and are flexible and easy to strip. This cable incorporates two elements with glass-reinforced plastic elements that provide excellent tensile performance and mechanical strength during and after installation.



[Images for reference purposes only]



6^(*)-12 up to 144 fibres cable structure

Applications:

- Outdoor
- Ducts

G.652.D FIBRE OPTIC SPECIFICATIONS

Fibre type		Single Mode
Core diameter		9 μm
MFD	@1310 nm	9.2 ± 0.4 μm
Cladding diameter		125 ± 1.0 μm
Cladding non circularity		≤ 1.0%
Core/Cladding concentricity error		≤ 0.6 μm
Proof stress		≥ 0.69 GPa
Attenuation	@1310 nm	≤ 0.34 dB/km
	@1550 nm	≤ 0.20 dB/km
Macrobend loss	50 mm radius, 100 turns, @1550 nm	≤ 0.05 dB
	50 mm radius, 100 turns, @1625 nm	≤ 0.10 dB
Cabled Fibre Attenuation	@1310 nm	≤ 0.40 dB/km
	@1550 nm	≤ 0.30 dB/km
Zero-Dispersion wavelength		1300 ~ 1324 nm
Standard		
ITU-T		G.652.D

G.657.A2 FIBRE OPTIC SPECIFICATIONS

Fibre type		Single Mode
Core diameter		9 μm
MFD	@1310 nm	8.6 ± 0.4 μm
Cladding diameter		125 ± 1 μm
Cladding non circularity		≤ 1.0%
Core/Cladding concentricity error		≤ 0.6 μm
Proof stress		≥ 0.69 GPa
Attenuation	@1310 nm	≤ 0.40 dB/km
	@1550 nm	≤ 0.30 dB/km
Macrobend loss	15 mm radius, 1 turn, @1550 nm	≤ 0.05 dB
	15 mm radius, 1 turn, @1625 nm	≤ 0.10 dB
Zero Dispersion Slope		≤ 0.092 ps/nm ² .km
Zero Dispersion Wavelength		1300 ~ 1324 nm
Standard		
ITU-T		G.657.A2



Colour of Fibres and Micromodules

[France Télécom]

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

Features

- Dielectric cable
- Micromodule cable
- HDPE outer sheath
- Flexible and easy-to-strip micromodules
- Water blocking yarns and water blocking tape
- External reinforcement with two GFRP side elements embedded in cable sheath
- Single mode fibre - G.652.D or G.657.A2
- France Télécom colour code for fibres and micromodules

CABLE SPECIFICATIONS										
Fibre count		–	6 ^(*)	12	24	36	48	72	96	144
Number of micromodules		–	1	1	2	3	4	6	8	12
Fibres per micromodule		–	6	12	12	12	12	12	12	12
Cable diameter (D)		mm	5.6 ±0.5	5.6 ±0.5	7.0 ±0.5	7.5 ±0.5	7.5 ±0.5	9.1 ±0.5	9.6 ±0.5	10.8 ±0.5%
Weight		kg/km	22	23	31	38	39	58	64	80
Outer sheath	Material	–	HDPE							
	Colour	–	Black							
Water blocking elements		–	Water blocking tape and yarns							
Strengthening elements		–	GFRP symmetrical elements on sheath							
Temperature	Storage	°C	-40 ~ 70							
	Operation		-40 ~ 70							
Curvature	Static Dynamic	–	10 x D 20 x D							
Crushing		N/10cm	2000							
Tensile (max)		N	800	1000			1600	2000		
Impact		J	5							
Kink		N	R=10 x D							
Standards			IEC 60793-1							
			IEC 60793-2							
			IEC 60794-3							

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