

DATASHEET

No-Armored Outdoor Fiber Optic cable

Make High-speed Optical network Connections.



OMC INDUSTRY CO.LIMITED

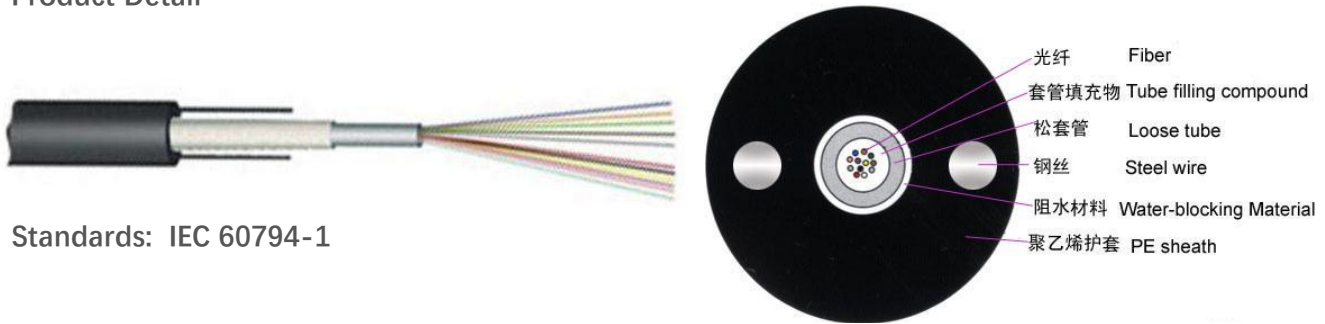
2018|En version1.0

Description

Outdoor Optical fiber cable positioned between CO and first DP in FTTX network. Used as mainline cable which environment is in Buried ,Aerial, under earth Pipes, Poles etc.

The fibers, 250µm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. Over the tube, water-blocking material is applied to keep the cable watertight. Two parallel steel wires are placed at the two sides. The cable is completed with a polyethylene (PE) sheath.

Product Detail



Standards: IEC 60794-1

Part No.	Fibers	Cable OD (mm)	Weight Kg/km	Tensile strength Long term/short term(N/1m)	Crush resistance Long term/short term(N/1m)	Bending Radius Static/Dynamic (mm)
GYXY-2~12X	2~12	6.0	36	500/1200	300/1000	10D/20D

Standard color of fiber and tube

The color code of the tubes and the individual fibers, shall be in accordance with the table as below:

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Slate	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

Transport/Storage/Operating Temperature:-40°C ~ +70°C

Package

Standard Reel Length: 2000m; OEM Package is available Once request.

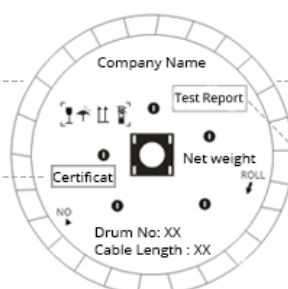
Package with Roll



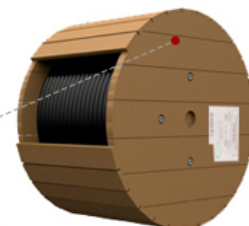
Fumigation Certificate

2km per Roll

Special mark as requirements



Full seal Roll



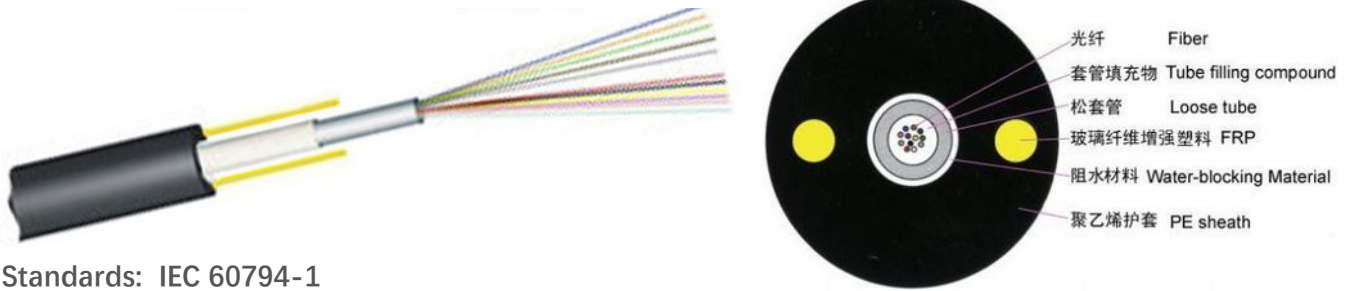
Test Report

Description

Outdoor Optical fiber cable positioned between CO and first DP in FTTX network. Used as mainline cable which environment is in Buried ,Aerial, under earth Pipes, Poles etc.

The fibers, 250µm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. Over the tube, water-blocking material is applied to keep the cable watertight. Two parallel FRP wires are placed at the two sides. The cable is completed with a polyethylene (PE) sheath.

Product Detail



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Package

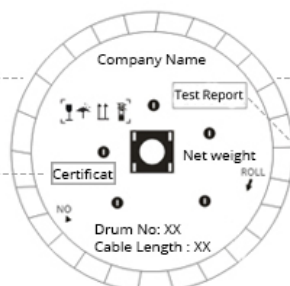
Standard Reel Length: 2000m; OEM Package is available Once request.

Package with Roll

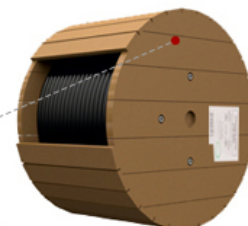


Fumigation Certificate

2km per Roll
Special mark as requirements



Full seal Roll



Test Report



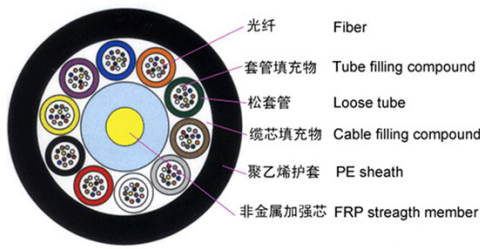
Stranded loose tube No-Metallic strength Member No-armored cable-GYFTY

Description

Outdoor Optical fiber cable positioned between CO and first DP in FTTX network. Used as mainline cable which environment is in Buried ,Aerial, under earth Pipes, Poles etc.

The fibers, 250µm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A Fiber Reinforced Plastic (FRP) locates in the center of core as a non-metallic strength member. The tubes (and fillers) are stranded around the strength member into a compact and circular core. After the cable core is filled with the filling compound to protect it from water ingress, the cable is completed with a PE sheath.

Product Detail



Standards: IEC 60794-1

Part No.	Fibers	Tubes	Cable OD (mm)	Weight Kg/km	Tensile strength Long term/short term(N/1m)	Crush resistance Long term/short term(N/1m)	Bending Radius Static/Dynamic (mm)
GYFTY-2~6X	2~6	1	10.6	88	400/1000	300/1000	10D/20D
GYFTY-8~12X	8~12	2	10.6	88	400/1000	300/1000	10D/20D
GYFTY-14~18X	14~18	3	10.6	88	400/1000	300/1000	10D/20D
GYFTY-20~24X	20~24	4	10.6	88	400/1000	300/1000	10D/20D
GYFTY-26~30X	26~30	5	10.6	88	400/1000	300/1000	10D/20D
GYFTY-32~36X	32~36	6	10.6	88	400/1000	300/1000	10D/20D
GYFTY-2~6X	2~6	1	11	97	600/1500	300/1000	10D/20D
GYFTY-8~12X	8~12	2	11	97	600/1500	300/1000	10D/20D
GYFTY-14~18X	14~18	3	11	97	600/1500	300/1000	10D/20D
GYFTY-20~24X	20~24	4	11	97	600/1500	300/1000	10D/20D
GYFTY-26~30X	26~30	5	11	97	600/1500	300/1000	10D/20D
GYFTY-32~36X	32~36	6	11	97	600/1500	300/1000	10D/20D
GYFTY-38~42X	38~42	7	11	97	600/1500	300/1000	10D/20D
GYFTY-44~48X	44~48	8	12	113	600/1500	300/1000	10D/20D
GYFTY-50~60X	50~60	5	12	113	600/1500	300/1000	10D/20D
GYFTY-62~72X	62~72	6	12	113	600/1500	300/1000	10D/20D
GYFTY-2~6X	2~6	1	12	120	1000/3000	300/1000	10D/20D
GYFTY-8~12X	8~12	2	12	120	1000/3000	300/1000	10D/20D
GYFTY-14~18X	14~18	3	12	120	1000/3000	300/1000	10D/20D
GYFTY-20~24X	20~24	4	12	120	1000/3000	300/1000	10D/20D
GYFTY-26~30X	26~30	5	12	120	1000/3000	300/1000	10D/20D
GYFTY-32~36X	32~36	6	12	120	1000/3000	300/1000	10D/20D
GYFTY-38~42X	38~42	7	12	120	1000/3000	300/1000	10D/20D
GYFTY-44~48X	44~48	8	12	120	1000/3000	300/1000	10D/20D
GYFTY-50~60X	50~60	5	13	137	1000/3000	300/1000	10D/20D
GYFTY-62~72X	62~72	6	13	137	1000/3000	300/1000	10D/20D
GYFTY-74~84X	74~84	7	13	137	1000/3000	300/1000	10D/20D
GYFTY-86~96X	86~96	8	13.9	154	1000/3000	300/1000	10D/20D
GYFTY-98~108X	98~108	9	15.3	185	1000/3000	300/1000	10D/20D
GYFTY-110~120X	110~120	10	15.3	185	1000/3000	300/1000	10D/20D



Standard color of fiber and tube

The color code of the tubes and the individual fibers, shall be in accordance with the table as below:

No.	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Slate	White
No.	7	8	9	10	11	12
Color	Red	Black	Yellow	Violet	Pink	Aqua

Transport/Storage/Operating Temperature:-40°C ~ +70°C

Package

Standard Reel Length: 2000m; OEM Package is available Once request.

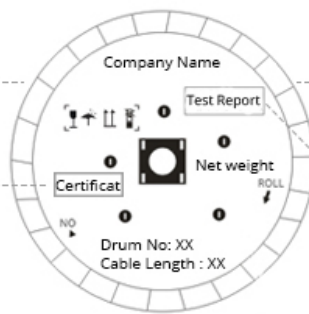
Package with Roll

Full seal Roll

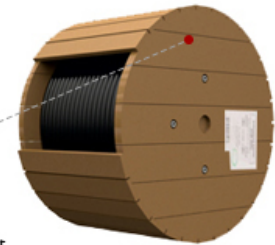


Fumigation Certificate

2km per Roll
Special mark as requirements



Test Report





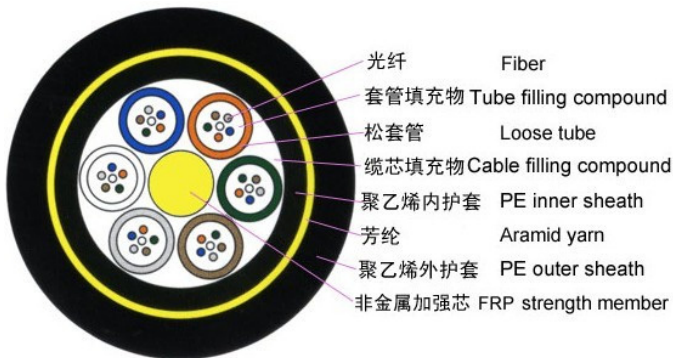
Stranded loose tube No-Metallic strength member, Double Sheath, No-armored cable-GYHTY

Description

Outdoor Optical fiber cable positioned between CO and first DP in FTTX network. Used as mainline cable which environment is in Buried ,Aerial, under earth Pipes, Poles etc.

The fibers, 250µm, are positioned in a loose tube made of a high modulus plastic. The tubes are filled with a water-resistant filling compound. A Fiber Reinforced Plastic (FRP) locates in the center of core as a non-metallic strength member. The tubes (and fillers) are stranded around the strength member into a compact and circular core. After the cable core is filled with filling compound, it is covered with thin PE (polyethylene) inner sheath. Then, a layer of aramid yarn is applied as additional strength member and the cable is completed with a polyethylene (PE) outer sheath.

Product Detail



Part No.	Fibers	Tubes	Cable OD (mm)	Weight Kg/km	Tensile strength Long term/short term(N/1m)	Crush resistance Long term/short term(N/1m)	Bending Radius Static/Dynamic (mm)
GYFTY-2~6X	2~6	1	10.7	90	600/1500	300/1000	10D/20D
GYFTY-8~12X	8~12	2	10.7	90	600/1500	300/1000	10D/20D
GYFTY-14~18X	14~18	3	10.7	90	600/1500	300/1000	10D/20D
GYFTY-20~24X	20~24	4	10.7	90	600/1500	300/1000	10D/20D
GYFTY-26~30X	26~30	5	10.7	90	600/1500	300/1000	10D/20D
GYFTY-32~36X	32~36	6	10.7	90	600/1500	300/1000	10D/20D

Standard color of fiber and tube

The color code of the tubes and the individual fibers, shall be in accordance with the table as below:

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Package

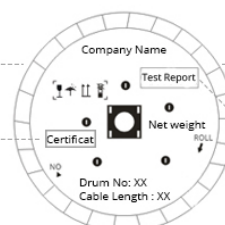
Standard Reel Length: 2000m; OEM Package is available Once request.

Package with Roll

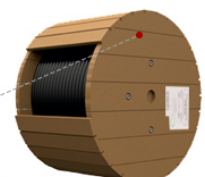


2km per Roll

Special mark as requirements



Full seal Roll



Fumigation Certificate

Test Report

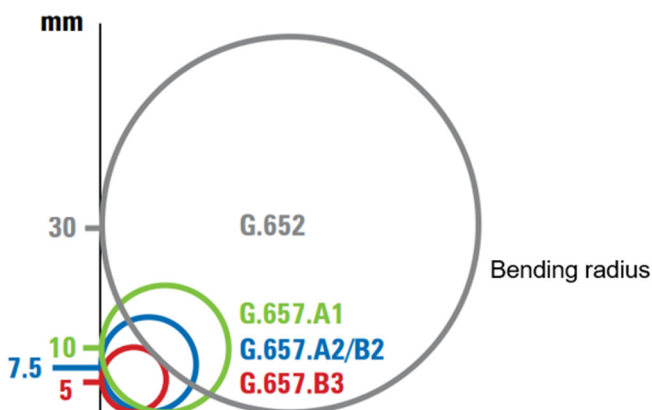
Characteristics

- Good mechanical and temperature performance
 - High strength loose tube that is hydrolysis resistant
 - Special tube filling compound ensure a critical protection of fiber
 - Two parallel steel wires ensure tensile strength
 - PE sheath protects cable from ultraviolet radiation
 - Small diameter, light weight and friendly installation
- Long delivery length

Optical fiber technical parameters-SMF

Item	Unit	Specification
Attenuation	dB/km	1310nm \leq 0.4 ; 1550nm \leq 0.3
Dispersion	Ps/nm. km	1285~1330nm \leq 3.5, 1550nm \leq 18.0
Zero dispersion wavelength	Nm	1300~1324
Zero dispersion slope	Ps/nm. km	\leq 0.095
Fiber cutoff wavelength	Nm	\leq 1260
Mode field diameter	Um	9.2 \pm 0.5
Mode field concentricity	Um	\leq 0.8
Cladding diameter	um	125 \pm 1.0
Cladding non-circularity	%	\leq 1.0
Coating/cladding concentricity error	Um	\leq 12.5
Coating diameter	um	245 \pm 10
Bending, dependence induced attenuation	1550nm, 1turns,32mm diameter 100rums,60mm diameter	\leq 0.5 dB
Proof test	kpsi	\geq 100

Package



ITU recommendation G.657 specifies two classes of single-mode bend insensitive fiber patch cables: G.657 A and G.657 B. Each category (A and B) is then divided into two sub-categories: G.657.A1, G.657.A2 and G.657.B1, G.657.B2. The minimum bend radius of G.657.A1 fibers is 10 mm, of the G.657.A2 and G.657.B1 fibers is 7.5 mm and of the G.657.B2 fibers is 5 mm. Among, ITU-T G.657.A1 and ITU-T G.657.A2 fibers are fully compliant with ITU-T G.652.D fibers.

Optical fiber technical parameters-MMF

Item	Unit	Specification	
Attenuation	dB/km	850nm ≤ 3.5	
Bandwidth	MHz*km	50/125μm	62.5/125μm
		850nm ≥ 200	850nm ≥ 160
		1300nm ≥ 200	1300nm ≥ 200
Step	dB	≤ 0.1	
Irregularities over fiber length and point discontinuity	dB	≤ 0.1	
Difference backscatter coefficient	dB/km	50/125μm	62.5/125μm
		≤ 0.08	≤ 0.1
Cladding diameter	um	125 ± 1.0	
Cladding non-circularity	%	≤ 1.0	
Coating/cladding concentricity error	Um	≤ 12.5	
Coating diameter	um	245 ± 10	
Bending, dependence induced attenuation	850nm, 1300nm 100 turns, 75mm diameter	≤ 0.5 dB	
Proof test	kpsi	≥ 100	

Technical Data-Transmission

Fiber type	Attenuation				OFL bandwidth	Effective modal bandwidth	10 Gigabit Ethernet SX	Min bend radius
	1310/1550nm		850/1300nm					
Conditions	Typical	Maximum	Typical	Maximum	850/1300nm	850nm	850nm	/
Unit	dB/km	dB/km	dB/km	dB/km	MHZ.km	MHZ.km	m	mm
G652D	0.36/0.22	0.5/0.4	---	---	---	---	---	16
G657A1	0.36/0.22	0.5/0.4	---	---	---	---	---	10
G657A2	0.36/0.22	0.5/0.4	---	---	---	---	---	7.5
50/125	---	---	3.0/1.0	3.5/1.5	≥ 500/500	---	---	30
62.5/125	---	---	3.0/1.0	3.5/1.5	≥ 200/500	---	---	30
OM3	---	---	3.0/1.0	3.5/1.5	≥ 1500/500	≥ 2000	≤ 300	30
OM4	---	---	3.0/1.0	3.5/1.5	≥ 3500/500	≥ 4700	≤ 550	30
BIF-OM3	---	---	3.0/1.0	3.5/1.5	≥ 1500/500	≥ 2000	≤ 300	7.5
BIF-OM4	---	---	3.0/1.0	3.5/1.5	≥ 3500/500	≥ 4700	≤ 550	7.5

Technical Data-Transmission

Fiber type	Attenuation				OFL bandwidth	Effective modal bandwidth	10 Gigabit Ethernet SX	Min bend radius
Conditions	1310/1550nm		850/1300nm		850/1300nm	850nm	850nm	/
	Typical	Maximum	Typical	Maximum				
Unit	dB/km	dB/km	dB/km	dB/km	MHZ.km	MHZ.km	m	mm
G652D	0.36/0.22	0.5/0.4	---	---	---	---	---	16
G657A1	0.36/0.22	0.5/0.4	---	---	---	---	---	10
G657A2	0.36/0.22	0.5/0.4	---	---	---	---	---	7.5
50/125	---	---	3.0/1.0	3.5/1.5	≥ 500/500	---	---	30
62.5/125	---	---	3.0/1.0	3.5/1.5	≥ 200/500	---	---	30
OM3	---	---	3.0/1.0	3.5/1.5	≥ 1500/500	≥ 2000	≤ 300	30
OM4	---	---	3.0/1.0	3.5/1.5	≥ 3500/500	≥ 4700	≤ 550	30
BIF-OM3	---	---	3.0/1.0	3.5/1.5	≥ 1500/500	≥ 2000	≤ 300	7.5
BIF-OM4	---	---	3.0/1.0	3.5/1.5	≥ 3500/500	≥ 4700	≤ 550	7.5