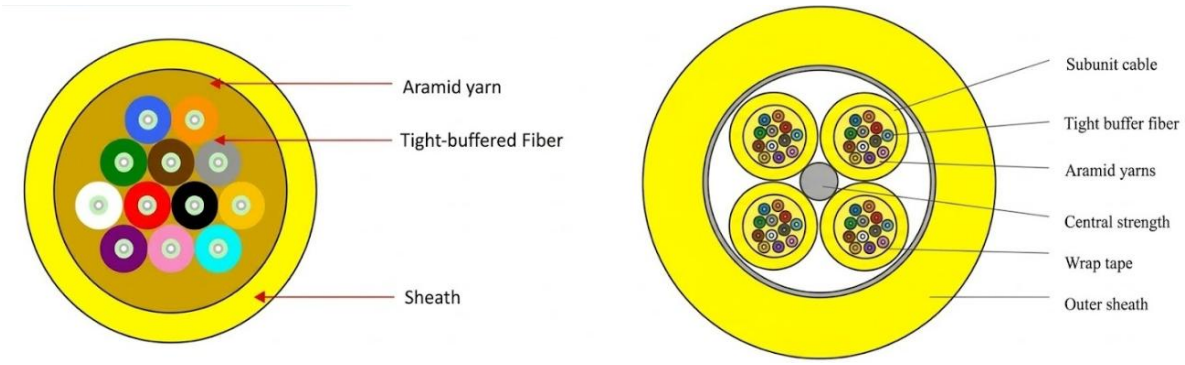
Single Mode OFC

Tight Buffer Indoor Cable

Cable Construction



Genius Indoor Unarmored Tight Buffer Cable is designed for reliable and flexible indoor fiber optic installations. The tight-buffered fiber structure enables easy termination and quick installation in data centres, LAN networks, and building backbones. Aramid yarn strength members provide good tensile strength, while the flame-retardant outer jacket ensures enhanced safety for indoor environments

Key Features

- Indoor Tight Buffer Cable offers compact, reliable indoor fiber connectivity
- Tight buffer fiber design enables fast termination and simplified installation
- Aramid yarn reinforcement ensures high tensile strength and durability
- LSZH outer sheath provides enhanced fire safety and low smoke emission
- Compact multi-fiber design supports high-density cable management
- Engineered for reliable high-speed data center and LAN connectivity
- Genius Network Brand Performance warranty for 25 Years

Product Construction

Cable Type	Indoor Tight Buffer, Single Mode
Fiber Grade	G657A1
Fiber Count	2F to 48F
Tight Buffer material	LSZH
Tight Buffer Diameter	0.90±0.05 mm
Outer Jacket Material	LSZH
Outer Sheath Thickness	1.5 mm (Nominal)
Outer Jacket Color	Yellow

Parameter	Values						
Fiber count	2	4	6	8	12	24	48
Number of Subunit	NA						4
Fiber count / Subunit	NA						12
Strength Member	Aramid Yarn						Aramid Yarn + FRP (2.6mm)
Fiber Color (As per EIA/TIA 598)	Blue & Orange	Blue to Brown	Blue to White	Blue to Black	Blue to Aqua	Blue to Aqua	Blue to Aqua
Cable diameter (mm)	4.1±0.3	4.8±0.3	5.1±0.3	5.6±0.3	6.2±0.3	8.1±0.3	14.8±0.3
Weight (Approx.) Kg/Km	12	17	22	30	35	55	165
Weight (Approx.) Kg	92±15	92±15	92±15	92±15	120±25	172±25	212±25

Note – For 24F cables, fibers 1–12 follow the standard color sequence (Blue to Aqua). Fibers 13–24 repeat the same color sequence and are identified with three black dots for clear differentiation

Fiber Characteristics

Fiber Grade	G657A1
Attenuation Loss @ 1310 nm	≤0.35 dB/km
Attenuation Loss @ 1550 nm	≤0.21 dB/km
Polarization Mode Dispersion	≤0.2 ps/√km
MFD @1310 nm	9.1 um ± 0.4 µm
MFD @1550 nm	10.4 um ± 0.6 µm
Cut-off wavelength	≤1260 nm
Zero-dispersion wavelength	1312 ± 12 nm
Zero-dispersion slope	≤0.092 ps/nm²*km
Core Diameter	9.1 µm±0.5 µm
Cladding Diameter	125 µm±1.0 µm
Core non-circularity	< 2.0%
Cladding non-circularity	< 0.8%
Coating diameter – Uncolored	245±8 µm
Coating/cladding concentricity error	< 10 µm
Coating non-circularity	5%
Core/cladding concentricity error	< 0.8 µm

Mechanical Parameters

Tensile Strength (Short)	800 N (till 24F) & 1320N (for 48F)
Tensile Strength (Long)	300 N (till 24F) & 400N (for 48F)
Crush Resistance (Short)	1000 N / 100 mm
Crush Resistance (Long)	300 N / 100 mm
Bend Radius (Short)	20D (D – Diameter of the cable)
Bend Radius (Long)	10D (D – Diameter of the cable)
Torsion Strength	±180°

Environmental Specification

Operation Temperature	-20°C to +60°C
Installation Temperature	-10°C to +60°C
Storage Temperature	-20°C to +60°C

Standards, Compliances & Certifications

- RoHS Compliant
- Compliance with ANSI/TIA-568-C.3, ANSI/TIA 568.3-D, ISO/IEC 11801 CENELEC, EN 50173,
- Compliance with Telcordia GR-326-CORE, IEC 874-1, ITU-T G.657A1
- Compliance to Mechanical Test Standard IEC 60794-1-E2/E2/E3/E4/E6/E7
- Compliance to temperature Standards for Fiber Cable IEC 60794-1-2-F1
- Compliance with IEC 60332-1, IEC 60754-1, IEC 61034-2, ASTM D2843 & ASTM D2863 for LSZH Jacketed Cable

Packaging

Packaging	Wooden Drum – 1Km±10%

Ordering Information

Part Number	Product Description
GFS2CUTBMTULS006	Genius Fiber Optic cable 6 core SM Multitube Tight Buffered Indoor Cable
GFS2CUTBMTULS012	Genius Fiber Optic cable 12 core SM Multitube Tight Buffered Indoor Cable
GFS2CUTBMTULS024	Genius Fiber Optic cable 24 core SM Multitube Tight Buffered Indoor Cable

Note – Last 3 Digit of Part NumberIndicate Number Of cores in Fiber Cable

Version No – R1

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