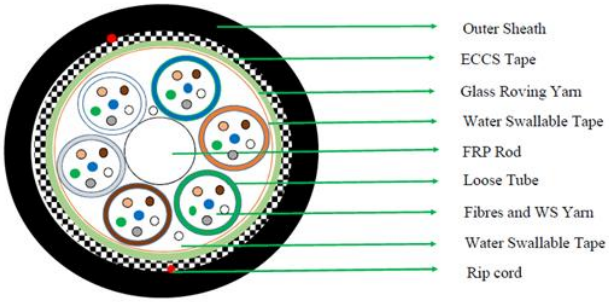
Single Mode OFC

Multi Loose Tube Glass Roving Yarn Dry Core

Cable Construction



Genius Dry Core Fiber Optic Cable is designed with an FRP central strength member and ECCS armor for enhanced mechanical strength and durability. Its dry core construction using water-swellable tapes and yarn ensures reliable moisture protection without the use of gel, enabling clean and easy installation. The loose tube design with glass roving yarn offers excellent fiber protection and long-term performance stability. Suitable for outdoor and duct applications, it delivers high tensile strength, durability, and superior resistance to environmental conditions

Key Features

- Gel-free dry core design enables quick installation and easy fiber access
- ECCS steel tape armouring ensures high tensile strength and Crush Resistance
- Loose tube design with FRP member for long durability
- Low attenuation optical performance supports reliable long-distance transmission
- Genius Network Brand Performance warranty for 25 Years

Product Construction

Cable Type	Single Mode, MLT, Dry Core
Fiber Grade	G652D
Fiber Count	6F / 12F / 24F / 48F
Loose tube diameter	2.2 ±0.1 mm
Loose tube material	PBT (Gel Free)
Armoring Type	ECCS Tape
Central Strength Member	FRP Rod
Peripheral Strength Member	Glass Roving Yarn
Strength Member Size	2.3 ±0.1 mm
Rip Cord	Polyester Rip Cord - 2Nos
Moisture Barrier	Water Swallable Tape
Outer Jacket Material	HDPE / LSZH
Outer Jacket Color	Black
Outer Cable Diameter	11.5 ±0.5 mm
Sheath Thickness	1.5 mm (Nominal)
Weight	115 Kg/km±10% for HDPE 145 Kg/km±10% for LSZH

Parameter	Values			
Fiber count	6	12	24	48
Loose tube count	3	6	6	6
Fiber count per tube	2	2	4	8
Tube Color (As per EIA/TIA 598)	Blue to Green	Blue & White	Blue & White	Blue & White
Fiber Color (As per EIA/TIA 598)	Blue & Orange	Blue & Orange	Blue to Brown	Blue to Black
Filler count	3	0	0	0

Fiber Characteristics

Fiber Grade	G652D
Attenuation Loss @ 1310 nm	≤0.36 dB/km
Attenuation Loss @ 1550 nm	≤0.23 dB/km
Polarization Mode Dispersion	≤0.1 ps/√km
MFD @1310 nm	9.4 um ± 0.4 µm
MFD @1550 nm	10.4 um ± 0.4 µm
Cut-off wavelength	≤1260 λcc
Zero-dispersion wavelength	1312 ± 12 nm
Zero-dispersion slope	≤0.091 ps/nm²*km
Core Diameter	9.1 µm±0.5 µm
Cladding Diameter	125 µm±1.0 µm
Coating Diameter (Uncolored)	245 µm ±10 µm
Core/cladding concentricity	≤0.6 µm
Coating - Cladding concentricity	≤12.0 µm
Cladding non circularity	≤1.0%

Environmental Specification

Operation Temperature	-20°C to +70°C
Installation Temperature	0°C to +60°C
Storage Temperature	-20°C to +70°C

Mechanical Properties

Max. Tensile Strength	2000 N
Max. Crush Test	2000 N /100 mm
Cable Bend Test	20D (D – Diameter of the cable)
Torsion Strength	±180°

Standards, Compliances & certifications

- RoHS Compliant
- Compliance with ISO/IEC 11801, EIA/TIA 568C.3, ITU-T G.652D, GR-20
- Compliance with ANSI/TIA 598-D Color Code standard
- Compliance to Mechanical Test Standard IEC 60794-1-E2/E2/E3/E4/E6/E7
- Compliance with 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 – 2Km±10%

Ordering Information

Part Number	Product Description
GFS2GDLTMSAPE006	Genius Fiber Optic cable 6 core SM Multitube Glass Roving Dry HDPE Cable
GFS2GDLTMSAPE012	Genius Fiber Optic cable 12 core SM Multitube Glass Roving Dry HDPE Cable
GFS2GDLTMSAPE024	Genius Fiber Optic cable 24 core SM Multitube Glass Roving Dry HDPE Cable
GFS2GDLTMSAPE048	Genius Fiber Optic cable 48 core SM Multitube Glass Roving Dry HDPE Cable
GFS2GDLTMSALS006	Genius Fiber Optic cable 6 core SM Multitube Glass Roving Dry LSZH Cable
GFS2GDLTMSALS012	Genius Fiber Optic cable 12 core SM Multitube Glass Roving Dry LSZH Cable
GFS2GDLTMSALS024	Genius Fiber Optic cable 24 core SM Multitube Glass Roving Dry LSZH Cable
GFS2GDLTMSALS048	Genius Fiber Optic cable 48 core SM Multitube Glass Roving Dry LSZH Cable

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

Version No – R1

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