

# 16-core single-mode armored fiber

## Article Overview

Single-mode 16-core armored fiber optic cables are designed for high-speed, long-distance communication with robust protection against environmental and mechanical hazards.

## Overview

A single-mode 16-core armored fiber optic cable contains 16 individual single-mode fibers, optimized for long-distance data, voice, and video transmission. The armored construction provides mechanical protection, moisture resistance, and rodent deterrence, making it ideal for harsh outdoor environments, including direct burial, overhead, and pipeline installations (FIBERHOME GYTA53-16B1.3) .

## Construction and Features

- o Fiber Type: Single-mode (OS2), supporting high bandwidth and minimal signal attenuation over long distances .
- o Core Arrangement: 16 fibers within a water-blocked loose tube or gel-filled single tube, depending on the manufacturer .
- o Armoring: Typically includes corrugated steel or aluminum interlocking armor, providing crush resistance, tensile strength, and protection against rodents and external damage .
- o Outer Jacket: UV-resistant polyethylene or plenum-rated jackets for outdoor durability and flame resistance .
- o Strength Members: Aramid yarn or steel rods for tensile support and anti-buckling properties .

## Applications

- o Telecommunications Carrier Networks: Reliable backbone for metropolitan and long-haul networks .
- o Direct Burial and Overhead Installations: Suitable for pipelines, aerial lines, and underground ducts .
- o Critical Infrastructure: Supports high-speed data transmission for utilities, industrial sites, and broadband networks .
- o Indoor/Outdoor Use: Some variants are plenum or riser-rated for multi-story building installations .

## Advantages

- o Durability: Armored design protects against mechanical stress, crushing, and environmental hazards .
- o High Performance: Single-mode fibers ensure minimal attenuation and high-speed data transmission over long distances .
- o Ease of Installation: Rip cords and flexible armor designs simplify access to fibers and reduce installation time .
- o Compliance: Many cables meet industry standards such as Telecordia GR-20, IEC 60794, and ITU-T



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recommendations .

## Example Product

The FIBERHOME GYTA53-16B1.3 is a 16-core single-mode outdoor armored cable featuring a water-blocked loose tube, steel armoring, and high tensile strength. It is suitable for direct burial, overhead, and pipeline installations, providing reliable performance for carrier-grade networks . In summary, single-mode 16-core armored fiber optic cables are ideal for robust, long-distance network deployments where protection against environmental and mechanical hazards is critical, ensuring reliable high-speed communication for telecom, industrial, and infrastructure applications.

Primus Cable offers armored bulk fiber in OS2 single mode and OM1, OM3, OM4 multimode, with three

CommScope outside plant fiber optic cables are meticulously designed to withstand the rigors of outdoor environments while

16 Core GYTS Fiber Optic Cable is the outdoor fiber optic cable type used for duct and aerial applications. We supply

Indoor-Outdoor Structured Fiber Optic Cable solutions provide the versatility of selecting Traditional Gel-Filled/Dry-Core Loose-Tube

Find premium single mode fiber optic cables for high-speed data transmission. 20 years of expertise and worldwide delivery.

Discover 16 core fiber optic cable for reliable data transmission. Explore durable, CE-certified solutions with G652D fiber and

CommScope designs and manufactures a comprehensive line of fiber optic cables--from outside plant to indoor/outdoor and fire

16 Core Fiber Optic Cable Manufacturers, Factory, Suppliers From China, Through more than 8 years of business, we have

SteelFlex armored OS2 cables feature premium single-mode fiber, capable of transferring data at 10G for 40km or 40G/100G for

Single-mode optical fibre is suitable for data transmission over long distances (>100km) and it tends to be used for cable TV, internet,

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Find here Armoured Fiber Optic Cable, 4 Core Armoured Fiber Optic manufacturers,

MDPE Molex Loose Tube Armored Fiber Cable is constructed of gel-filled loose tubes (4-12 fibers). The core is water blocked,

and horizontal installations for riser (OFCE), plenum (OFCE), and harsh environments. Opti-Core®; Fiber Optic Interlocking Armored C

View Eland Cables" range of singlemode and multimode fibre optic cables - loose tube and tight buffered. Technical support, fast

The fiber, either single-mode or multimode type, are positioned in a loose tube made of a high modulus plastic. The tubes are filled

Our Armored Singlemode Fiber Optic Cables are designed for optimal performance and reliability in

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