

GORE® Fiber Optic Cables (900 micron)



This version of Gore's fiber optic cables provides a high level of crush protection similar to the Simplex versions while drastically reducing shrink back and the time required to terminate samples. These single-mode and multi-mode cables deliver unfailing signal transmission with low optical loss in rigorous maintenance, flight and military operational conditions, ensuring lifetime performance and lower total costs (Table 1).

Gore's 900-micron optical fiber cables incorporate smaller, lighter, and highly flexible materials that are easy to route — making them an excellent choice for inside-the-box applications. They can also be packaged with GORE® Cable Protection Systems for outside-the-box applications.

Typical Applications

- Inside-the-box
- Outside-the-box
- Transceivers

Standards Compliance

- ABD0031 (AITM 2.0005); BSS7230; FAR Part 25, Appendix F, Part I: Flammability
- ABD0031 (AITM 3.0008B); BSS7238; FAR Part 25, Appendix F, Part V: Smoke Density
- ABD0031 (AITM 3.0005); BSS7239: Toxicity
- ARINC 802-3: Performance Requirements (GSC-13-85067-00)

Table 1: Cable Properties

Optical

Property	Value
Signal Transmission Speed Gb/s	Up to 100
Maximum Optical Loss at 850 nm dB/km	3.0
Maximum Optical Loss at 1310 nm dB/km	1.0

Mechanical / Environmental

Property	Value
Jacket Material	PEEK
Jacket Color	Tan
Core Type	Single Mode or Multi-Mode
Coating Type	High-Temperature Acrylate
Buffering System	Expanded PTFE
Temperature Range °C	-60 to +135

Table 2: Cable Characteristics

Gore Part Number	Core Type	Core/Cladding/Coating	Nominal Outer Diameter mm (in)	Minimum Bend Radius mm (in)	Nominal Weight g/m	Maximum Tensile Strength N
GSC-13-85067-00	OM1 (Multi-Mode)	62.5/125/245	0.9 (0.35)	18.0 (0.71)	0.85	50
GSC-13-85424-00	OM4 (Multi-Mode)	50/125/245	0.9 (0.35)	18.0 (0.71)	0.85	50
GSC-13-85375-00	SM (Single Mode)	9/125/245	0.9 (0.35)	18.0 (0.71)	0.85	50
GSC-13-85869-00	OM5 (Multi-Mode)	50/125/245	0.9 (0.35)	18.0 (0.07)	0.85	50

Connector Systems & Backshells

GORE® Fiber Optic Cables are designed to fit a variety of high-speed aerospace and defense connector systems and backshells such as ARINC, MIL-STD-38999, and MIL-PRF-29504. Contact the specific manufacturer such as Amphenol®, COTSWORKS®, Glenair®, and Radiall for exact part numbers, tooling information, and termination instructions.

Samples & Ordering Information

The 900 micron version of GORE® Fiber Optic Cables is available in standard sizes (Table 2). To place an order, contact an authorized distributor for in-stock availability at gore.com/cable-distributors. To view our full inventory and order complimentary samples of selected products for prototyping and evaluation in your application, visit gore.com/hsdc-sample-inventory-air-defense.

For more information or to discuss specific characteristic limits and application needs — including fiber options packaged with GORE® Cable Protection Systems for outside-the-box applications, contact a Gore representative today at gore.com/aerospace-defense-contact.

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