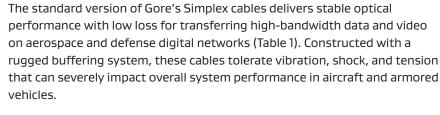
GORE® Fiber Optic Cables (1.2 mm Simplex)



Gore's 1.2 mm Simplex cables in single-mode and multi-mode core types are also smaller and lighter without losing mechanical strength. They minimize routing and installation complexities in condensed areas of a fiber optic communications system.

Typical Applications

- Avionics/vectronics digital networks
- Ethernet backbone
- Flight management systems
- HD streaming video systems
- Inside-the-box/laser pigtail
- Intercom/radio systems
- Strain-gauge systems
- Transceivers

Standards Compliance

- ABD0031 (AITM 2.0005);
 BSS7230-F6; BSS7324-7.25;
 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
- MIL-STD-202, Method 103: Humidity
- MIL-STD-810, Method 509: Salt Fog
- MIL-STD-810, Method 510: Sand and Dust

Table 1: Cable Properties

Optical

	value				
Property	FON1002	FON1003	FON1253	FON1307	FON1371
Signal Transmission Speed Gb/s			Up to 10		
Maximum Optical Loss at 1300 nm dB/km	_	_	_	≤1.5	≤ 0.7
Maximum Optical Loss at 1310 nm dB/km	≤ 0.7	≤ 1.5	≤ 0.4	_	_

Value

Mechanical / Environmental

Property	Value				
Jacket Material	Extruded FEP				
Jacket Color	Blue				
Core Type	Single Mode or Multi-Mode, Graded Index				
Coating Type	Polyimide	Polyimide	High-Temperature Acrylate		
Buffering System			PTFE		
Temperature Range °C	-65 to +200	-65 to +200	-55 to +125	-55 to +125	-55 to +125



Table 2: Cable Characteristics

_	ore Number	Core Type	Core/ Cladding/ Coating	Nominal Outer Diameter mm (in)	Minimum Bend Radius mm (in)	Nominal Weight g/m	Maximum Tensile Strength N
FON	N1002	SM (Single Mode)	9/125/155	1.2 (0.04)	Short-Term: ≥ 12.0 (0.47) Long-Term: ≥ 25.0 (0.98)	2.5	350
FON	N1003	OM1 (Multi-Mode, Graded Index)	62.5/125/155	1.2 (0.04)	Short-Term: ≥ 12.0 (0.47) Long-Term: ≥ 25.0 (0.98)	2.5	350
FOI	N1253	SM (Single Mode)	9/125/250	1.2 (0.04)	Short-Term: ≥ 12.0 (0.47) Long-Term: ≥ 25.0 (0.98)	2.5	350
FOI	N1307	OM2 (Multi-Mode, Graded Index)	50/125/250	1.2 (0.04)	Short-Term: ≥ 12.0 (0.47) Long-Term: ≥ 25.0 (0.98)	2.5	350
FO	N1371	OM1 (Multi-Mode, Graded Index)	62.5/125/250	1.2 (0.04)	Short-Term: ≥ 12.0 (0.47) Long-Term: ≥ 25.0 (0.98)	2.5	350

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 1.2 Simplex 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 other impedance options, contact a Gore representative today at **gore.com/aerospace-defense-contact.**

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