



FlightGuide® Simplex 1.8 mm Multimode 50/125 OM2 Fiber Optic Cable

P/N: C10027

Overview	With more than 35 years of experience manufacturing fiber optic products for the aerospace and defense markets, Lightera is proud to offer a wide range of specialty solutions that meet stringent industry standards. We work to help ensure optimal quality, reliability, and safety to streamline and facilitate complex, sensitive operations. The Lightera family of FlightGuide aerospace fiber optic cables are available in both single-mode and multimode fiber constructions. The fibers are carbon coated with a silicone/ETFE buffer. The cable has a braided aramid layer for strength with an ETFE outer jacket. These tight-buffered cables are compatible with connectors and/or termini designed for tight jacket construction.
Typical Applications	• Aircraft Sensors • Communication Systems • Corrosive Chemical Environments • Data Transmission • Harsh Industrial Environments

Product Specifications	
Product Description	FlightGuide Simplex 1.8 mm Multimode 50/125 OM2
Physical Characteristics	
Cable Construction	Multimode Graded-Index Simplex
Fiber Core Diameter	50 ± 3 µm
Cladding Diameter	125 ± 1 µm
Coating Type 1	Carbon
Coating Type 2 Diameter	450 ± 25 µm
Coating Type 2	Silicone
Buffer Diameter	900 ± 50 µm
Buffer Material	ETFE
Outer Cable Diameter	1.8 ± 0.1 mm
Cable Weight	4.0 kg/km
Outer Jacket Material	ETFE
Outer Jacket Color	Orange
Optical Characteristics	
Attenuation @ 1300 nm	≤ 4 dB/km
Attenuation @ 850 nm	≤ 6 dB/km
Bandwidth @ 1300 nm	≥ 400 MHz-km
Bandwidth @ 850 nm	≥ 400 MHz-km
Numerical Aperture	0.20 ± 0.015
Mechanical and Environmental	
Installation Load (Maximum)	90 lb. (400 N)
Operating Load (Maximum)	30 lb. (133 N)
Minimum Bend (Installation)	25 mm
Minimum Bend (Operating)	8 mm
Operating Temperature	-55 to +150 °C
Storage Temperature	-55 to +85 °C
Flammability	FAR 25.869
Extinguish Time	0 Seconds
Max Burn Length	3 Inches
Proof Test Level	≥ 200 kpsi
Order by Part Number	C10027
NOTE	The operating temperature ranges are general guidelines. Consult with our Technical Sales department to determine the optimal coating and jacketing material for your specific application. 1.860.678.6636.
Contact Information	For additional information please contact your sales representative. You can also visit our website at www.lightera.com or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website.
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