

GEO50 Geophysical Graded-Index Optical Fiber

P/N: F13469



Overview

GEO50 is designed for distributed temperature sensing applications and will function in the high temperature range up to 300 °C for up to 20 years. The fiber is protected against moisture and hydrogen ingression across the temperature range.

The fiber's carbon/polyimide coating help sensure survivability and functionality when deployed and put in service in harsh environments.

Typical Applications

Datacom in Harsh Environments

Distributed Temperature
Sensing

High-Temperature DTS

Local Area Networks with
Elevated Temperature
Requirements



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Product Specifications	
Product Description	GEO50 Geophysical Graded-Index Optical Fiber
Physical Characteristics	
Coating Material	Carbon/PYROCOAT® polyimide
Core Diameter	50 ± 3 μm
Cladding Diameter	125 ± 2 μm
Coating Diameter	155 ± 5 μm
Core/Clad Offset	≤ 3 µm
Core Non-Circularity	≤ 5%
Clad Non-Circularity	≤ 2.0%
Crimp & Cleave Compatible	No
Optical Characteristics	
Туре	Multimode Graded-Index
Numerical Aperture	0.20
Attenuation @ 1300 nm	≤ 2 dB/km
Attenuation @ 850 nm	≤ 4 dB/km
Coating/Buffer Descriptions	
Hermetic Carbon Layer	300 to 400 Å
Operating Temperature	-65 to +300 °C
Short-Term Temperature Excursions	Up to 400 °C
Mechanical and Environmental	
Short-Term Bend Radius	≥ 8 mm
Long-Term Bend Radius	≥ 10 mm
Proof Test Level	200 kpsi (0.689 GPa)
Order by Part Number	F13469
OPTIONS: Additional coatings, cabling, connectorization, metalization, other upgrades	

to discuss your specific application requirements.

NOTES: OFS polyimide optical fibers are known to operate in environments up to 300 °C. Performance is application dependent. Contact our Technical Sales department

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.





