

Corning® InfiniCor® 300 Optical Fiber

Product Information

CORNING

Bandwidth demands are growing rapidly in today's enterprise networks. Corning's InfiniCor® optical fiber, the world's first laser-optimized™ 62.5 μm multimode fiber, will help you stay ahead of escalating network demands. Established on superior measurement technology and manufacturing control, InfiniCor fiber also provides full compatibility with legacy protocols and applications.

Standards Compliance*

ISO/IEC 11801	Type OM1 fiber
IEC 60793-2-10	Type A1-OM1 fiber
TIA/EIA	492AAAA-A

*Meets or exceeds standards requirements for the fiber specifications listed.

Optimized Data Rate over Distance

1 GB/s over 300 m at 850 nm	1 GB/s over 550 m at 1300 nm
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Optical Specifications

Bandwidth

Overfilled Modal Bandwidth* (MHz•km)	
850 nm	1300 nm
200	500

*OFL BW, per TIA/EIA 455-204 and IEC 60793-1-41.

Attenuation

Wavelength (nm)	Maximum Value (dB/km)
850	≤ 2.9
1300	≤ 0.6

No point discontinuity greater than 0.2 dB. Attenuation at 1380 nm does not exceed the attenuation at 1300 nm by more than 1.0 dB/km.

Induced attenuation from 100 turns around a 75 mm mandrel shall be ≤ 0.5 dB at 850 nm and 1300 nm.

Numerical Aperture

0.275 ± 0.015

Dimensional Specifications

Glass Geometry

Core Diameter	62.5 ± 2.5 μm
Cladding Diameter	125.0 ± 2.0 μm
Core-Clad Concentricity	≤ 1.5 μm
Cladding Non-Circularity	≤ 1.0%
Core Non-Circularity	≤ 5%

Coating Geometry

Coating Diameter	242 ± 5 μm
Coating-Cladding Concentricity	< 12 μm

ColorPro™ Identification Technology

InfiniCor 300 fiber is also available in colored variants, enabled by ColorPro™ identification technology. Corning fibers with ColorPro™ identification technology deliver better efficiency in cable manufacturing, simplify inventory management, and leverage an enhanced fiber product offering.

How to Order

Contact your sales representative, or call the Optical Fiber Customer Service Department:
Ph: 1-607-248-2000 (U.S./Can.)
+44-1244-525-320 (Europe)
Email: cofic@corning.com
Please specify the fiber type, attenuation, and quantity when ordering.



Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)
Temperature Dependence	-60°C to +85°C*	≤ 0.10
Temperature Humidity Cycling	-10°C to +85°C and up to 98% RH	≤ 0.10
Water Immersion	23°C ± 2°C	≤ 0.20
Heat Aging	85°C ± 2°C	≤ 0.20
Damp Heat	85°C at 85% RH	≤ 0.20

Operating Temperature Range: -60°C to +85°C

*Reference temperature = +23°C

Mechanical Specifications

Proof Test

The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.69 GPa). Higher proof test levels are available.

Length

Fiber lengths available up to 17.6 km/spool.

Performance Characterizations

Characterized parameters are typical values.

Refractive Index Difference	2%
Effective Group Index of Refraction (n_{eff})*	850 nm: 1.496 1300 nm: 1.491
* n_{eff} was empirically derived to the third decimal place using a specific commercially available OTDR.	
Fatigue Resistance Parameter (n_d)	20
Coating Strip Force	Dry: 0.6 lbs. (2.7 N) Wet: 14 days in 23°C water soak: 0.6 lbs. (2.7 N)
Rayleigh Backscatter Coefficient (for 1 ns Pulse Width)	850 nm: -68 dB 1300 nm: -76 dB
Chromatic Dispersion	
Zero Dispersion Wavelength (λ_0):	1332 nm ≤ λ_0 ≤ 1354 nm
Zero Dispersion Slope (S_0):	≤ 0.097 ps/(nm ² •km)
Spectral Attenuation (Typical Fiber)	