Corning® Multimode Optical Fiber

62.5/125 Fiber

Product Information

Corning® 62.5/125 Fiber is part of Corning’s line of standard multimode fibers. It is a graded-index 62.5/125 μm nominal multimode fiber with a 62.5 μm core diameter and a 125 μm cladding diameter. Corning 62.5/125 fiber offers full compatibility with legacy systems.

Versatility
Corning 62.5/125 fiber is suitable for installation in all premise applications including backbone, riser, and horizontal. Typical applications are local area and campus-wide networks carrying data, voice, and video services using LEDs, 850 nm VCSELs, 790 nm CD lasers, and 1300 nm Fabry-Perot lasers. This product is specified by industry standards for fiber-optic network protocols, including Ethernet, Token Ring, FDDI, ATM and Fiber Channel.

Coating
Corning fiber is protected for long-term performance and reliability by the CPC™ coating system. Corning’s enhanced, dual acrylate CPC coatings provide excellent fiber protection and are easy to work with. CPC coatings are designed to be mechanically stripped and have a nominal outside diameter of 245 μm. CPC coatings are optimized for use in many single and multi-fiber cable designs including loose tube, ribbon, slotted core and tight buffer cables.

Quality, Consistency, Reliability
Corning 62.5/125 fiber offers consistent performance and proven reliability based on 150 years of glassmaking experience and 30 years of fiber manufacturing. Every meter of fiber is taken through Corning’s rigorous Quality Architecture Program and is produced by state-of-the-art manufacturing. Corning 62.5/125 fiber is backed by Corning’s Center for Fiber Testing, a world leading resource for qualifying new products, system testing and customer support.

Corning leads the industry in standards development through its cooperative efforts with standards organizations worldwide. These include Telecommunications Industry Association (TIA), the Institute of Electrical and Electronics Engineers, Inc. (IEEE), ATM Forum and Fiber Channel.

Technical Support
Every reel of Corning fiber is supported by hundreds of technical experts, ready to address any concerns related to optical fiber and its deployment. Corning’s state-of-the-art tracking systems provide answers to specific questions on every reel of fiber produced and purchased.

Optical Specifications

Attenuation
- ≤ 3.000 dB/km @ 850/1300 nm
- No point discontinuity greater than 0.2 dB
- The attenuation at 1380 nm does not exceed the attenuation at 1300 nm by more than 1.0 dB/km
- The induced attenuation caused by wrapping the fiber 100 turns around a 75 mm mandrel shall not exceed 0.5 dB at 850 nm and 1300 nm

Special attenuation cells available upon request.

Bandwidth

<table>
<thead>
<tr>
<th>Standard Bandwidth Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>850/1300 nm (MHz.km)</td>
</tr>
<tr>
<td>160/500</td>
</tr>
<tr>
<td>200/500</td>
</tr>
</tbody>
</table>

Other bandwidth cells available upon request.

Chromatic Dispersion
- Zero Dispersion Wavelength (ν₀): 1332 nm ≤ ν₀ ≤ 1354 nm

Dispersion = D(λ) = \frac{S_0}{4} \left( \frac{\lambda - \lambda_0^+}{\lambda_0^-} \right) \text{ ps/(nm*kilometer)}

For 750 nm ≤ λ ≤ 1450 nm, λ = Operating Wavelength

- Zero Dispersion Slope (S₀): ≤ 0.097 ps/(nm*kilometer)
- Core Diameter: 62.5 ± 3.0 μm
- Numerical Aperture: 0.275 ± 0.015

Environmental Specifications

Table: Environmental Test Condition

<table>
<thead>
<tr>
<th>Temperature Dependence @ -60°C to +85°C</th>
<th>≤ 0.20 dB/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Humidity Cycling @ -40°C to +85°C and 4% to 98% RH</td>
<td>≤ 0.20 dB/km</td>
</tr>
</tbody>
</table>

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

Dimensional Specifications

<table>
<thead>
<tr>
<th>Standard Length (km/reel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 - 8.8 kmms</td>
</tr>
</tbody>
</table>

Special lengths available upon request.

Glass Geometry
- Cladding Diameter: 125.0 ± 2.0 μm
- Core-Clad Confinement: ≤ 3.0 μm
- Cladding Non-Circularity: < 2.0%
- Core Non-Circularity: ≤ 5%

Coating Geometry
- Coating Diameter: 245 ± 5 μm
- Coating-Cladding Confinement: < 12 μm

Mechanical Specifications

Proof Test
- The entire length of fiber is subjected to a tensile proof stress ≥ 100 kpsi (0.7 GN/m²).

Performance Characterizations

Effective Group Index of Refraction (Nₑₑ)
- 1.496 at 850 nm
- 1.487 at 1300 nm

Nₑₑ was empirically derived to the third decimal place using a specific commercially available OTDR.

Fatigue Resistance Parameter (nₑ): 20

Coating Strip Force
- Dry: 0.7 lbs (3.2 N)
- Wet: 14 days in 23°C water soak: 0.7 lbs (3.2 N)
Ordering Information

To order Corning® 62.5/125 optical fiber, contact your sales representative, or call the Telecommunications Products Division Customer Service Department at 910-395-7659 (North America) and +1 607-794-7714 (outside of North America). Please specify the following parameters when ordering:

**Fiber Type:** 62.5/125 μm Multimode Fiber

**Reel Lengths:** 2.2, 3.3, 4.4, 6.6, and 8.8 kms

**Fiber Quantity:** kms

**Other:** (Requested ship date, desired attenuation cell, desired bandwidth cell, etc.)

---

Corning Incorporated
Telecommunications Products Division
Corning, NY 14831

Tel: 800-528-2524 (North America)
Tel: +1 607-786-8126 (International)
Fax: 800-639-9323 (North America)
Fax: +1 607-786-8344 (International)

E-mail: info@corningfiber.com
Internet: www.corningfiber.com

Corning is a registered trademark and InfiniCor is a trademark of Corning Incorporated, Corning, N.Y.