



# GigaPOF<sup>®</sup>-62LD

## Gigabit perfluorinated optical fiber

GigaPOF-62LD is a low attenuation, IR-transparent POF with higher bandwidth than any other type of plastic optical fiber. With a 62-micron core diameter, it easily couples to standard multi-gigabit transmitters and receivers, and the 750-micron outer diameter makes this fiber extremely robust and simple to handle. The combination of performance and simplicity makes this our most popular fiber for use in active cables and multi-gigabit data networking.

### Graded-index perfluorinated POF: combining the best of the glass fiber and plastic fiber worlds

Until now, the simplicity of plastic optical fiber came with a heavy price: low performance and a restriction to visible wavelengths. The Chromis GigaPOF<sup>®</sup> line overcomes that trade-off with low attenuation, IR-transparent perfluorinated polymer materials, a graded refractive index, and exacting geometric tolerances. GigaPOF-62LD easily supports Gigabit and 10-Gigabit Ethernet, HDMI, USB 3.0 and other multi-gigabit applications at distances up to 100 meters without dispersion compensation.

### Multi-gigabit transmission capability with the simplicity of plastic optical fiber

In active cable applications, an optical end-face can be prepared in seconds with our factory termination tool, and the fiber can be permanently clamped or glued directly into the optical sub-assembly, without any need for a ferrule.

In field-installable applications, our crimp-on LC connector attaches in under a minute, even by personnel with no fiber-optic training. End preparation is done with a low-cost, hand-held cutter, and requires no polishing.

### No need for special transceivers

GigaPOF-62LD cables can be used directly with standard multimode glass fiber transceivers at speeds up to 10 Gb/s. 850-nm VCSEL transceivers are recommended.



#### Product Specifications

##### Transmission Characteristics

Attenuation at 850 nm (dB/km)	≤ 60
Attenuation at 1300 nm (dB/km)	≤ 60
Bandwidth at 850 nm (MHz·km)	≥ 500
Numerical aperture	0.185 ± 0.015
Macro-bend loss (dB for 10 turns on a 25-mm radius quarter circle)	≤ 0.35
Zero dispersion wavelength (nm)	1200–1650
Dispersion slope (ps/nm <sup>2</sup> ·km)	≤ 0.06

##### Physical Characteristics

Core diameter (μm)	62.5 ± 5
Over-cladding diameter (μm)	750 ± 5
Core to over-cladding concentricity (μm)	≤ 5
Maximum tensile load (N)	15.0
Long-term bend radius (mm)	7.0

##### Environmental Performance

Temperature induced attenuation at 850 nm from -20 °C to +70 °C (dB/km)	≤ 5
Temperature induced attenuation at 850 nm from +75 °C 85% RH 30 day cycle (dB/km)	≤ 10