



GigaPOF[®]-120SR

Short-reach perfluorinated optical fiber

GigaPOF-120SR is a revolutionary POF offering high performance and unmatched simplicity in a single package. With easy termination, relaxed optical alignment tolerances, and excellent IR and visible transparency, GigaPOF-120SR takes POF to a whole new level.

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[®] line overcomes that trade-off with low attenuation, IR-transparent perfluorinated polymer materials, a graded refractive index, and exacting geometric tolerances. GigaPOF-120SR easily supports Gigabit Ethernet and other high-speed applications at distances up to 100 meters. Fast Ethernet is supported up to 200 meters.

A versatile performer

GigaPOF-120SR meets the need for a high-performance fiber that can be used with very inexpensive connectors and apparatus. The 120- μm core of this fiber allows wide alignment and dimensional tolerances for components, but still couples well to most high-speed detectors.

Like the rest of our GigaPOF[®] line of optical fibers, GigaPOF-120SR can be easily terminated with simple, inexpensive tools, and tolerates long-term installed bend radii as small as 10 mm.

Unequaled speed and flexibility

No other large-core optical medium provides the bandwidth and flexibility of GigaPOF-120SR. With minimum installed bend radius less than one third of 100/140 multimode silica fiber, and bandwidth 30 times higher than step-index POF, GigaPOF-120SR is your best choice for high speed in tight spaces.



| Product Specifications | |
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| Transmission Characteristics | |
| Attenuation at 850 nm (dB/km) | ≤ 60 |
| Attenuation at 1300 nm (dB/km) | ≤ 60 |
| Bandwidth at 850 nm (MHz.km) | ≥ 300 |
| Numerical aperture | 0.185 ± 0.015 |
| Macro-bend loss (dB for 10 turns on a 25-mm radius quarter circle) | ≤ 0.60 |
| Zero dispersion wavelength (nm) | 1200–1650 |
| Dispersion slope (ps/nm ² .km) | ≤ 0.06 |
| Physical Characteristics | |
| Core diameter (μm) | 120 ± 10 |
| Over-cladding diameter (μm) | 490 ± 5 |
| Core to over-cladding concentricity (μm) | ≤ 5 |
| Maximum tensile load (N) | 7.0 |
| Long-term bend radius (mm) | 10.0 |
| Environmental Performance | |
| Temperature induced attenuation at 850 nm from $-20\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$ (dB/km) | ≤ 5 |
| Temperature induced attenuation at 850 nm from $+75\text{ }^{\circ}\text{C}$ 85% RH 30 day cycle (dB/km) | ≤ 10 |