

GigaPOF-120SR

Perfluorinated short-reach POF



GigaPOF-120SR is a revolutionary plastic optical fiber 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 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 micron 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 a 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	
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
Macrobend 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
Cladding diameter (μm)	490 ± 7
Core-cladding concentricity (μm)	≤ 5
Maximum tensile load (N)	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