



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