

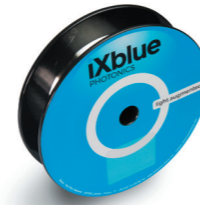
Harsh Environment | Fibers

Coatings & buffering for harsh environment

For more than 10 years, iXblue Photonics has developed large experience in the use of optical fibers in extreme conditions from undersea to space environment, oil and gas, nuclear, medical, and aerospace applications. iXblue Photonics in now offering a large variety of most adapted coating and buffer options, beyond standard acrylate coating to optimize the product lifetime in those difficult operating environment.

Some of the materials we have applied to our custom optical fiber products include:

- Acrylate, Fluoroacrylate & High-Temperature Acrylate
- Silicone & Silicone/Acrylate
- Polyimide
- Carbon
- Extrusion of custom materials Fluoropolymers (PFA, FEP, ETFE, PEEK, PVC)



Main Specifications for Polyimide fibers

| Product Name | Core diameter (μm) | Attenuation @1310 nm (dB/km) | Attenuation @1550 nm (dB/km) | MFD (μm) | Cutoff wave-length | Core NA | Cladding diameter (μm) | Coating diameter (μm) |
|-------------------------|--------------------|------------------------------|------------------------------|----------|--------------------|---------|-------------------------------------|-----------------------|
| IXF-SM-1550-125-PI-0.14 | 7 +/- 0.5 | <1.0 | < 0.8 | 9 +/- 1 | < 1310 | 0.14 | 125 +/- 2 80 +/- 2 on request* | 155 +/- 5 |
| IXF-SM-1550-125-PI-0.17 | 6.5 +/- 0.5 | <1.2 | <1.0 | 8 +/- 1 | < 1310 | 0.17 | 125 +/- 2 80 +/- 2 on request ** | 155 +/- 5 |

* Product name for 80 μm cladding diameter: IXF-SM-1550-80-PI-0.14
 ** Product name for 80 μm cladding diameter: IXF-SM-1550-80-PI-0.17

Weibull failure probability of IXF-SM-1550-125-PI fiber

