



## Verrillon® VSS200 Series—Erbium Doped Fiber

Verrillon Erbium Doped Fibers from AFL are available in a number of designs. Starting with fiber design, we offer both single-mode and multimode optical fibers having coatings and coating combinations, including Polyimide, Silicone-PFA and Carbon, which can be applied in conjunction with any of these outer coatings. Typically, these fibers are used in down-hole data logging, distributed sensing and imaging applications.

Verrillon carbon-coated optical fibers provide exceptionally high levels of hermeticity compared to commercial fibers. We provide extensive data that demonstrates the performance of our fiber. In addition, we provide one-stop shopping for customers requiring multi-count cabled hermetic fibers, if required, in metal jacketing tubes.

Consistent with our founding principles, we specialize in application optimized fibers, providing our customers unmatched flexibility in the their system design and performance.

### Features

- High numerical aperture design for low bend loss
- Reduced noise figure
- Excellent for use in EDFAs
- Superior run-to-run consistency

### Specifications—Erbium Doped Fiber

<b>PART NO.</b>	<b>EDF-1-125</b>
Description	Erbium Doped Fiber
<b>PARAMETER</b>	<b>VALUE</b>
<b>Material</b>	
Coating	Dual UV Acrylate
<b>Geometry</b>	
Clad Diameter (µm)	125 ± 1
Core/Clad Offset (µm)	≤ 0.3
Coat Diameter (µm)	250 ± 10
<b>Optical</b>	
Absorption	
@ 1550 nm (dB/m)	6.0 ± 1.0
@ 980 nm (dB/m)	4.2 ± 1.0
Cutoff Wavelength (nm)	920 ± 40
MFD <sup>1</sup> @ 1550 nm (µm)	5.5 ± 0.7
NA (nominal)	0.23
Attenuation @ 1200 nm (dB/m)	≤ 7.0
<b>Proof Test</b>	
Tensile Strength (kpsi)	≥ 200

<sup>1</sup> Petermann II Definition