

# Highly Doped Erbium Fibers for 1.53-1.61μm Lasers & Amplifiers

- Passive Components
- Collimation Packages
- FiberBench
- Optical Switches
- Rackbox Systems
- Connectors/Termination Tools
- Single Mode Fiber
- Rare Earth Doped
- Polarization Maintaining Fiber
- Photonic Crystal Fiber
- Multimode Fiber: Graded Index
- Multimode Fiber: Step Index
- Plastic Optical Fiber

## ER40-4/125

Liekki ER40-4/125 is a highly doped fiber for L-band amplifiers exhibiting a very low level of Polarization Mode Dispersion (PMD) and reduced nonlinear effects. This fiber is available in a low cutoff or a high cutoff version. The typical fiber length per application is about 15m.

### Optical Characteristics

- Peak Absorption at 1530nm: 40 ± 4dB/m
- Mode Field Diameter at 1550nm: 6.5 ± 0.5μm
- Core Numerical Aperture: 0.2
- Fiber Cutoff Wavelength: 800-980nm

## ER80-4/125

Liekki ER80-4/125 is a highly doped fiber for fiber lasers and amplifiers. It has a very high erbium concentration that minimizes the required application fiber length while providing strong gain and reduced nonlinear effects.

### Optical Characteristics

- Peak Absorption at 1530nm: 80 ± 8dB/m
- Mode Field Diameter at 1550nm: 6.5 ± 0.5μm
- Core Numerical Aperture: 0.2
- Fiber Cutoff Wavelength: 800-980nm

## ER80-8/125

Liekki ER80-8/125 is a large-mode-area, single mode fiber suitable for high-power amplifiers and lasers (output power of 25dBm or more). Good spliceability, high doping, and large core make this fiber ideal for high-peak-power pulse amplification in the eye-safe 1.5μm wavelength region.

### Optical Characteristics

- Peak Absorption at 1530nm: 80 ± 8dB/m
- Mode Field Diameter at 1550nm: 9.5 ± 0.5μm
- Core Numerical Aperture: 0.13
- Fiber Cutoff Wavelength: 1100-1400nm

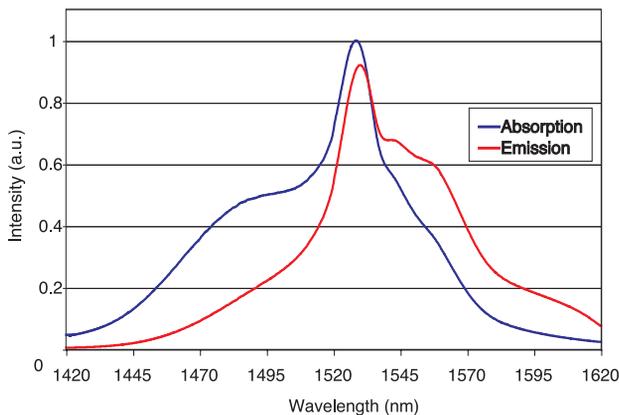
## ER110-4/125

Liekki ER110-4/125 is a highly doped fiber for ultra-short pulse amplifiers operating in the 1.5μm wavelength region. It has a very high erbium concentration that minimizes the required application fiber length while providing strong gain and reduced nonlinear effects.

### Optical Characteristics

- Peak Absorption at 1530nm: 110 ± 10dB/m
- Mode Field Diameter at 1550nm: 6.5 ± 0.5μm
- Core Numerical Aperture: 0.2
- Fiber Cutoff Wavelength: 800-980nm

Normalized Emission and Absorption Erbium Series



### Price Schedule – Call For Quantities > 250m

ITEM#	PRICE/m	\$	£	€	RMB
ER40-4/125	1 to 9m	\$ 24.00	£ 15.10	€ 22,30	¥ 229.20
	10 to 49m	\$ 19.05	£ 12.00	€ 17,70	¥ 181.95
	50 to 249m	\$ 14.30	£ 9.00	€ 13,30	¥ 136.55
ER80-4/125	1 to 9m	\$ 98.00	£ 61.75	€ 91,15	¥ 935.90
	10 to 49m	\$ 75.00	£ 47.25	€ 69,75	¥ 716.25
	50 to 249m	\$ 56.25	£ 35.45	€ 52,30	¥ 537.20
ER80-8/125	1 to 9m	\$ 98.00	£ 61.75	€ 91,15	¥ 935.90
	10 to 49m	\$ 75.00	£ 47.25	€ 69,75	¥ 716.25
	50 to 249m	\$ 56.25	£ 35.45	€ 52,30	¥ 537.20
ER110-4/125	1 to 9m	\$ 98.00	£ 61.75	€ 91,15	¥ 935.90
	10 to 49m	\$ 75.00	£ 47.25	€ 69,75	¥ 716.25
	50 to 249m	\$ 56.25	£ 35.45	€ 52,30	¥ 537.20

## Single Mode Very Highly Er-doped Fiber Specifications

ITEM#	RECOMMENDED OPERATING λ	PEAK ABSORPTION	MFD	CLADDING DIAMETER	COATING DIAMETER	CUTOFF WAVELENGTH	NA
ER40-4/125	L-Band	40 ± 4dB/m	6.5 ± 0.5μm	125 ± 2μm	245 ± 15μm	800-980nm	0.2
ER80-4/125	C-, L-Band	80 ± 8dB/m	6.5 ± 0.5μm	125 ± 2μm	245 ± 15μm	800-980nm	0.2
ER80-8/125	C-, L-Band	80 ± 8dB/m	9.5 ± 0.5μm	125 ± 2μm	245 ± 15μm	1100-1400nm	0.13
ER110-4/125	C-, L-Band	110 ± 10dB/m	6.5 ± 0.5μm	125 ± 2μm	245 ± 15μm	800-980nm	0.2