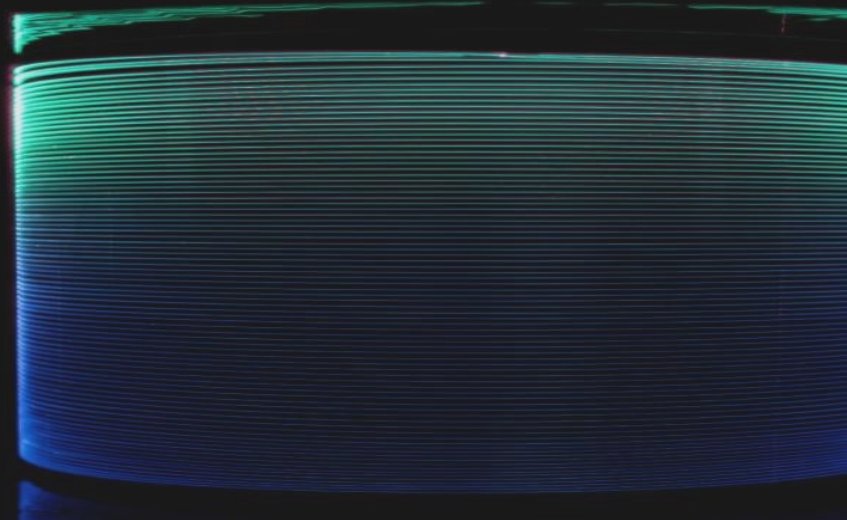


LIEKKI® Yb700-25/250 fibers are medium doped fibers with large core-to-cladding ratio. The fibers feature high pump absorption at an extremely high photodarkening resistivity for enabling short application lengths and long-term reliability. Together with the excellent beam quality, these fibers present the ideal choice for CW or pulsed amplifier designs.

LIEKKI® Yb700-25/250 fibers are available as double-clad (Yb700-25/250DC) and double-clad polarization maintaining (Yb700-25/250DC-PM) fibers.



Features

- Industry leading fiber deposition process — Direct Nanoparticle Deposition
- Large, low-NA core for excellent beam quality
- Very high photodarkening resistivity for long-term reliability
- High pump absorption for compact designs and low nonlinearities
- Proof tested to > 100 kpsi for long-term mechanical reliability
- Acrylate coating enables fiber applications in extreme environmental conditions: Proven to operate up to 120°C and in extreme humidity.
- Matching passive fibers available with optimized design for minimal splice loss

Applications

- High peak and average power pulsed amplifiers with excellent beam quality
- CW amplification
- IR source for frequency doubling
- Materials processing
- LIDAR
- Range finding

Typical Fiber Specifications

| Fiber | | LIEKKI® Yb700-25/250DC | LIEKKI® Yb700-25/250DC-PM |
|--|-------|--------------------------------|--------------------------------|
| Optical | Units | | |
| Peak Cladding Absorption at 976 nm (nominal) | dB/m | (6.5) | (6.9) |
| Cladding Absorption at 920 nm | dB/m | 1.5 ± 0.2 | 1.6 ± 0.2 |
| Core Numerical Aperture | | 0.070 ± 0.005 | 0.070 ± 0.005 |
| Cladding Numerical Aperture, ≥ | | 0.48 | 0.48 |
| Core background loss at 1200 nm, ≤ | dB/km | 25 | 25 |
| Birefringence, ≥ | 1E-04 | - | 1.4 |
| Geometrical and mechanical | | | |
| Core Diameter | µm | 25.0 ± 1.5 | 25.0 ± 1.5 |
| Core Concentricity Error, ≤ | µm | 1.0 | 1.0 |
| Cladding Diameter (flat-to-flat) | µm | 250 ± 5 | 250 ± 5 |
| Cladding Geometry | | Octagonal | Round, PANDA |
| Coating Diameter | | 350 ± 15 | 350 ± 15 |
| Coating Material | | Dual coated low index acrylate | Dual coated low index acrylate |
| Proof Test, ≥ | kpsi | 100 | 100 |