

2.8 μm ultrafast fiber laser

Femtum offers the first 3-μm class ultrafast fiber oscillator. This reliable, compact and maintenance-free laser is ideal for R&D applications in the mid-infrared.



Technical Specifications

| Optical ¹ | Standard | Custom |
|-----------------------------------|-----------------|--------------|
| Central wavelength | 2800 (± 20) nm | |
| Bandwidth (FWHM) | 10-30 nm | |
| Average power | 35 mW | > 100 mW |
| Pulse energy | 1 nJ | > 3 nJ |
| Repetition rate | ~ 35 MHz | 40 - 100 MHz |
| Peak power | > 1 kW | > 5 kW |
| Pulse duration | ~ 500 fs | 200- 500 fs |
| Beam diameter | < 3 mm | |
| M ² (Average of X & Y) | < 1.3 | |
| Output polarization | Linear | |

System specifications

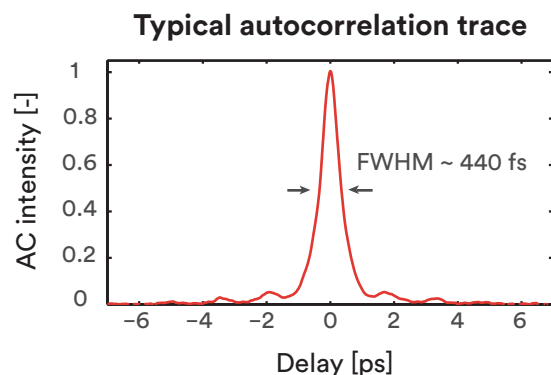
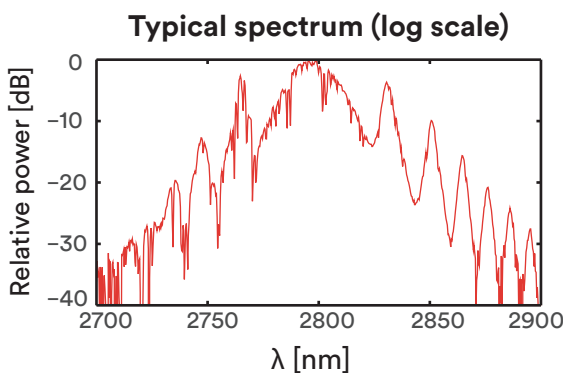
| | | |
|------------------------------------|--|---------------------------|
| Dimensions(W x H x D) ¹ | 24 × 5.2 × 17.3 in. | |
| Cooling | Fan-cooled | |
| Voltage | 100 to 240 V | |
| Beam delivery | Free space | Fiber output ² |
| Controller | Computer-controlled or integrated touch screen | |

KEY FEATURES

- Compact and turn-key laser system
- Self-starting automated mode locking
- Pulse duration < 600 fs
- Average power up to 100 mW
- Single-mode output

APPLICATIONS

- Mid-infrared frequency combs
- Nonlinear frequency conversion
- Supercontinuum generation
- High-field physics
- Nonlinear spectroscopy and microscopy



¹Specifications subject to change
²Single-mode delivery cable upon request