

Femtum Ultra 2800

Femtum offers a cutting-edge 3- μ m class ultrafast fiber oscillator. This reliable, compact and maintenance-free laser is designed to enable novel applications in the mid-infrared.



Technical Specifications

Optical ¹	Standard	Custom
Central wavelength	2800 ($\pm$ 5) nm	
Bandwidth (FWHM)	10-30 nm	
Average power	35 mW	> 300 mW
Pulse energy	1 nJ	> 5 nJ
Repetition rate	~ 35 MHz	40 - 100 MHz
Peak power	> 1 kW	> 10 kW
Pulse duration	~ 500 fs	250- 500 fs
Beam diameter	< 3 mm	
M ² (Average of X & Y)	< 1.3	
Output polarization	Linear	

System specifications

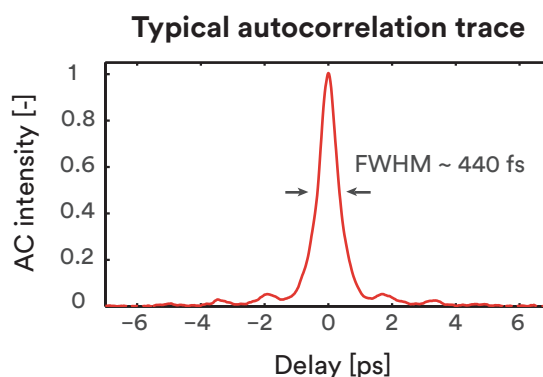
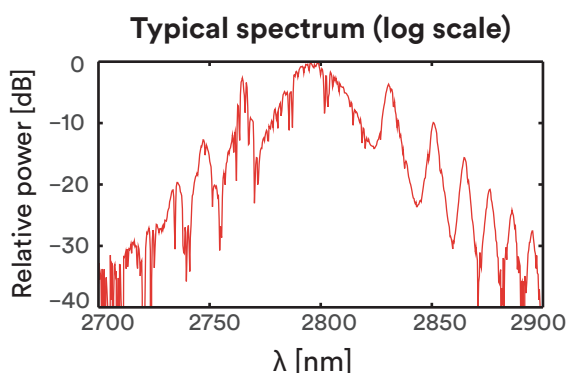
Dimensions ¹	16 x 14 x 3.5 in.	
Cooling	Passive cooling	
Voltage	100 to 240 V	
Beam delivery	Free space	Fiber output ²
Controller	Computer-controlled or integrated touch screen	

KEY FEATURES

- Compact and turn-key laser system
- Self-starting mode locking
- Integrated fast detector for monitoring
- Efficient all-fiber diode pumping at 980 nm
- Pulse duration < 600 fs
- Average power up to 300 mW
- Single-mode output

APPLICATIONS

- Mid-infrared frequency combs
- Material processing
- Mid-infrared spectroscopy and imaging
- Nonlinear frequency conversion
- High-field physics
- Supercontinuum generation



¹Specifications subject to change

²Single-mode delivery cable upon request