



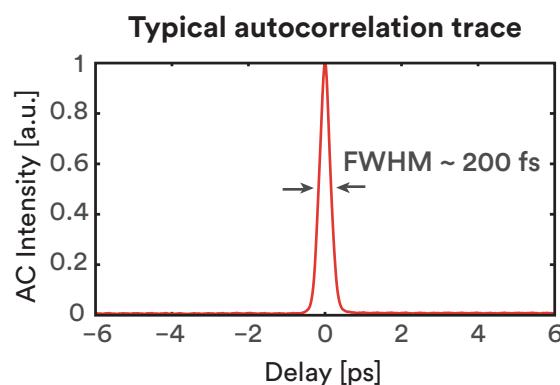
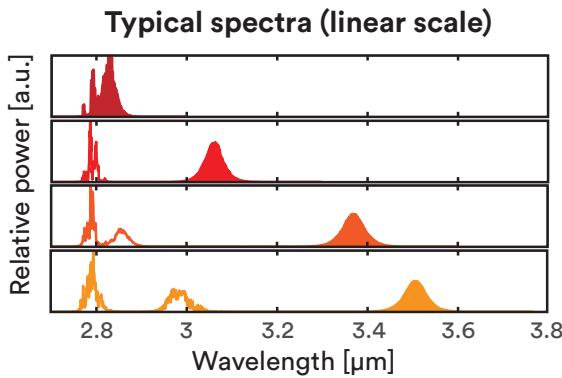
# Tunable mid-IR ultrafast laser

Femtum is proud to introduce the first commercial ultrafast fiber laser in the mid-infrared. This compact, maintenance-free and tunable laser system is ideal for scientific applications.



## Technical Specifications

Optical <sup>1</sup>	Standard
Central wavelength	2.8 - 3.4 μm
Bandwidth (FWHM)	10 - 75 nm
Average power	30 - 1000 mW
Pulse energy	1 - 30 nJ
Repetition rate	~ 35 MHz
Peak power	~ 1 - 100 kW
Pulse duration	< 500 fs
Beam diameter	< 3 mm
M <sup>2</sup> (Average of X & Y)	< 1.3
Output polarization	Elliptical
System specifications	
Dimensions (W x H x D) <sup>1</sup>	24 x 5.2 x 17.3 in.
Cooling	Fan-cooled
Voltage	100 to 240 V
Beam delivery	Free space or fiber output
Controller	Computer-controlled or integrated touch screen



<sup>1</sup>Specifications subject to change



# Femtum Nano 2800

Femtum introduces its first high-energy pulsed fiber laser for industrial and scientific use. This reliable laser produces nanosecond pulses in the microjoule range. Selective non-metal micro-processing in the mid-IR is now accessible !

## Technical Specifications

Optical <sup>1</sup>	Standard <sup>2</sup>
Signal wavelength <sup>3</sup>	2780 ( $\pm 50$ ) nm
Output power	10 mW to > 1 W
Repetition rate	1 to 50 kHz
Pulse duration	30 to 200 ns
Pulse energy	10 to > 100 $\mu$ J
M <sup>2</sup> (Average of X & Y)	< 1.5

## System specifications

Dimensions	24 x 17 x 3.5 in. (rack-mount, 2U)
Cooling	Passive cooling
Voltage	100 to 240 V
Beam delivery	Fiber cable or free space
Controller	Computer-controlled or integrated touch screen



## KEY FEATURES

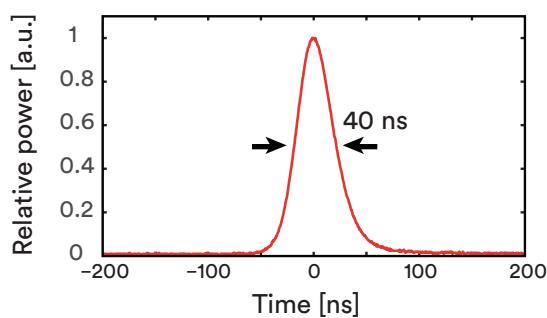
- Compact and turn-key system
- Fiber delivery cable
- High repetition rate
- High energy

## APPLICATIONS

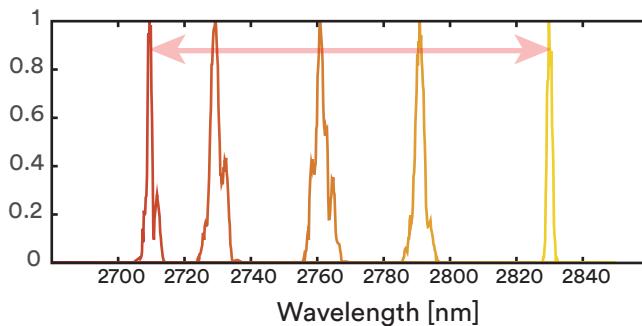
- Thin-films patterning
- Surface texturing of polymers
- Efficient mid-IR pump source
- Tissue ablation

## Graphs

Typical pulse shape



Typical spectrum<sup>4</sup>



<sup>1</sup> Specifications subject to change

<sup>2</sup> Custom specifications upon request

<sup>3</sup> Tunable version upon request

<sup>4</sup> Narrow linewidth option upon request

