

Femtum Amp 2800

Femtum introduces the first commercial erbium-doped fluoride fiber amplifier in the mid-infrared. This compact fiber system can efficiently amplify light at wavelengths around 2800 nm.



Technical Specifications

Optical ¹	Standard ²
Signal wavelength	2780 (± 50) nm
Output power	10 mW to > 1 W
Signal gain	10 to > 20 dB
Output beam diameter	< 3 mm
M ² (Average of X & Y)	< 1.3

System specifications

Dimensions ¹	16 × 14 × 3.5 in.
Cooling	Passive cooling
Voltage	100 to 240 V
Beam delivery	Free space ³
Controller	Computer-controlled or integrated touch screen

KEY FEATURES

- Compact and turn-key system
- Efficient all-fiber diode pumping at 980 nm
- Signal gain > 10 dB
- Single-mode output

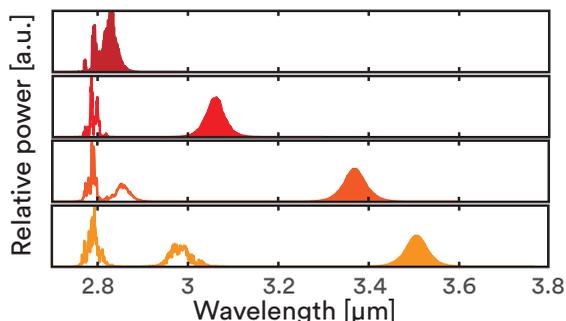
APPLICATIONS

- Femtosecond to CW amplification
- Amplifier for ICL, OPO, DFG sources
- Mid-infrared spectroscopy and imaging
- Nonlinear frequency conversion
- High-field physics
- Supercontinuum generation

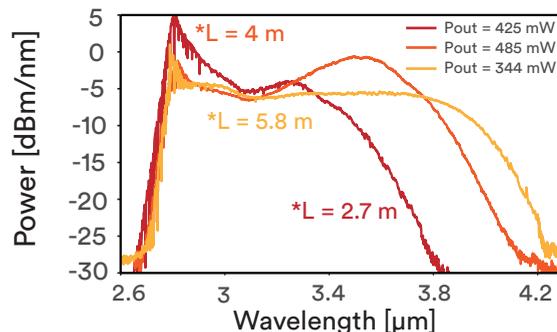
Example of application : Mid-IR ultrafast amplifier and spectral converter

When seeded with an ultrafast laser, this amplifier can generate a watt-level tunable ultrafast output or a high energy supercontinuum spanning from 2.6 to 4.2 μm.

Typical spectra of a tunable ultrafast amplifier



Supercontinuum spectra (log scale)



¹ Specifications subject to change
² Custom specifications upon request
³ Fiber output with single-mode delivery cable upon request

* L = Amplifier length