

FEATURES

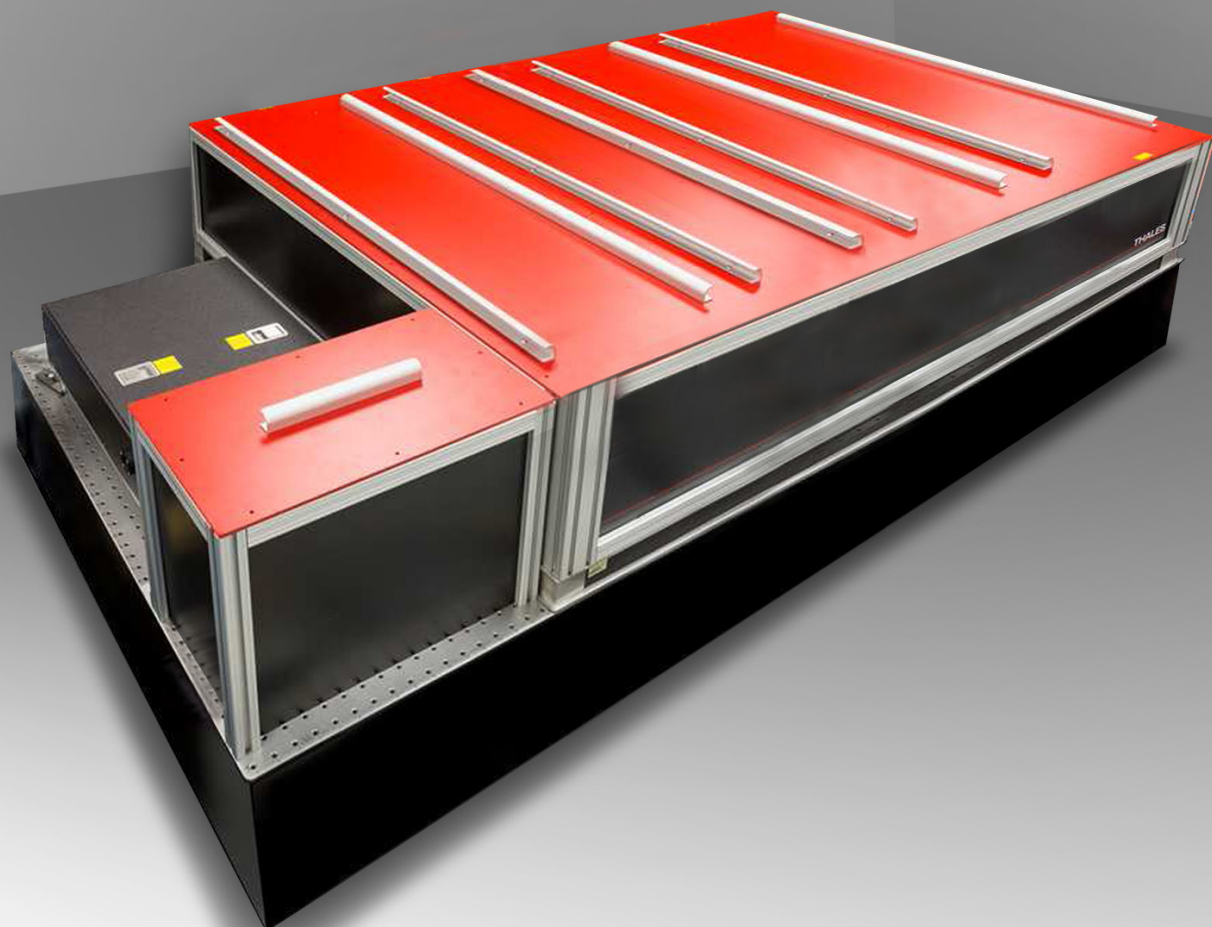
- > 1mJ at 6 to 8 μm
- < 200fs
- CEP stable
- 100Hz repetition rate
- Gaussian beam profile
- Easy maintenance
- Table top compact design

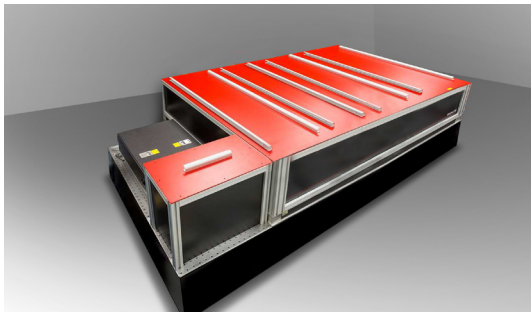
APPLICATIONS

- Biomedicine
- Spectroscopy
- Nonlinear optics
- Strong field physics

MIRUS

7 μm Optical Parametric Chirped Pulse Amplification (OPCPA)





MIRUS

7 μ m Optical Parametric Chirped Pulse Amplification (OPCPA)

The only millijoule class 7 μ m OPCPA on the market

MIRUS is the first commercially available ultra-short pulse laser system based on OPCPA technology demonstrating central emission wavelength at 7 μ m while covering a broad emission spectrum (> 2 μ m).

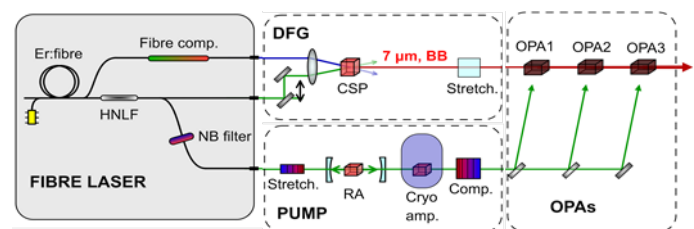
Starting from a single fiber oscillator, which delivers three outputs, it ensures optical synchronization of the pump and the seed, as well as a passive carrier to envelop phase stability obtained through difference frequency generation.

Thanks to a ruggedized design of the 2 μ m pump source, the OPCPA output beam demonstrates an outstanding energy stability with a Gaussian beam profile. This makes it the perfect candidate for spectroscopic applications or in the strong field physics domain, to take benefit of the wavelength scaling laws .

Specifications

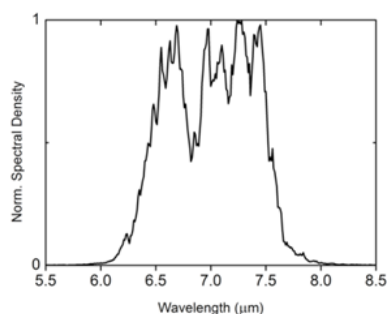
Average Power (mW)	100
Wavelength (μm)	6 to 8
Repetition rate (Hz)	100
Energy per pulse (mJ)	> 1
Pulse to pulse energy stability	< 3 % RMS
Pulse duration FWHM (fs)	< 200
Carrier to Envelope Offset (CEP)	Stable passively
Divergence (mrad)	< 2
Beam pointing stability (μrad)	< 10
Beam spatial profile (near field)	Gaussian

System Architecture

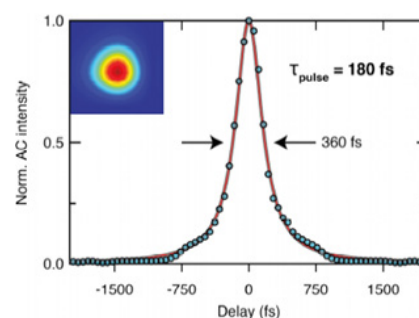


Complete system fits in a 3x1.5m² footprint

Typical measurements



OPCPA Spectrum after compressor



Pulse duration (CEP stable)

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