Y-Fi™ OPA - Robust, Briefcase-Sized Tunable Ultrafast SWIR/MWIR Source

Fiber laser-amplifier system with integrated infrared OPA.

Computer-controlled tuning, hands-free operation

Applications

- Short-wave infrared (SWIR) supercontinuum generation
- Mid-wave infrared (MWIR) supercontinuum generation
- Three and Four photon excitation fluorescence microscopy
- Pump probe spectroscopy
- Tip-enhanced mid-wave infrared nanoscopy and nanospectroscopy
- Retina-safe coherent Raman scattering (simulated Raman scattering, coherent anti-Stokes Raman scattering, impulsive stimulated Raman scattering, etc.)

Features

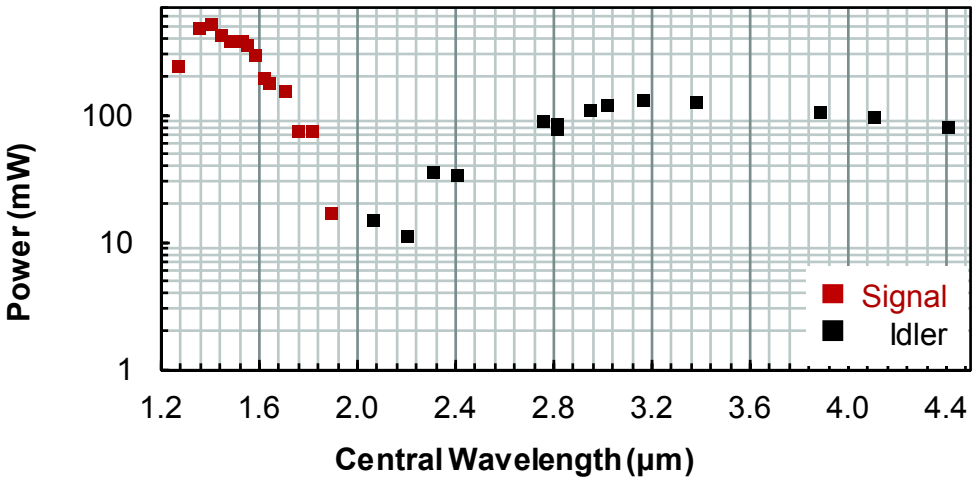
- Coherent white light seeded OPA
- Average power up to 400 mW in the Signal and 100 mW in the Idler
- <1.5% shot-to-shot pulse energy deviation in Signal
- Excellent beam quality: M^2 typically <1.4
- Residual 1 μm output available at separate port
- Intuitive control GUI including wavelength and pulse optimization
- Combination of clean (low pedestal) short pulses and high energy gives higher peak intensities to drive nonlinear optical processes
- Custom configurations available

The **Y-Fi™ OPA** is KMLabs' vertically integrated optical parametric amplifier pumped by a Y-Fi™ HP. The class-leading pulse duration of the 1035 nm centered Y-Fi™ HP results in both a stable, coherent white light seed source and exceptionally high conversion efficiency into the short-wave and mid-wave infrared.

Y-Fi™ OPA Unique Features

- Tunable repetition rate range of 1-2 MHz
- > 15% conversion efficiency into Signal and Idler
- Supports < 50 fs pulses
- Y-Fi™ HP output (1035nm, 3 μJ) also available, direct or residual after OPA
- Compact form factor: 12"x16"x5.5" optical head

Y-Fi™ OPA Tunability



KMLABS inc. LEADING IN ULTRAFAST

Contact us for full specifications or with questions

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