



Y-Fi™ Series - High Power and Repetition Rate Near-IR Ultrafast Fiber Lasers

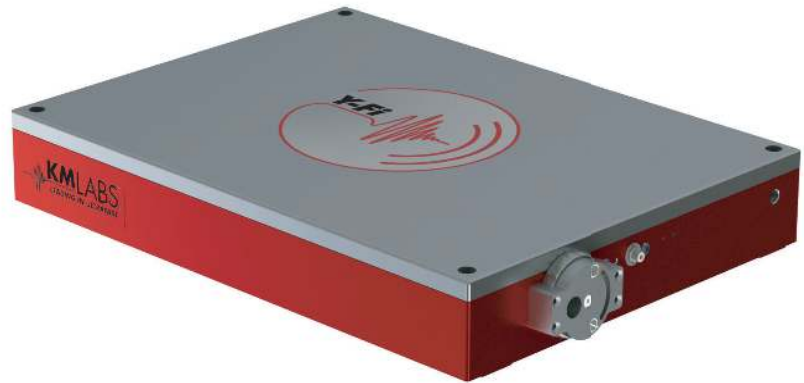
Ultra-compact μJ -class femtosecond fiber laser with unprecedented performance: clean pulses with duration as short as <150 fs

Applications Include

- OPCPA seeding
- OPA pumping
- Multiphoton microscopy
- Chemical spectroscopy
- Precision micromachining of tissues, glass, and plastics

Features

- Average power: 5W / 20 W / 50 W (Y-Fi™/Y-Fi™ HP / Y-Fi™ Ultra)
- $< 150/170/190$ fs pulse length with low pulse pedestal gives improved performance for driving nonlinear optical interaction: optimum efficiency at lower pulse energy / average power
- Tunable repetition rate (0.5-15, 60 MHz)
- Fully integrated, ruggedized, hands-free laser source
- Stable over large temperature range ($16-26^\circ\text{C}$)
- Graphical, intuitive software control with integrated diagnostics
- Computer controlled pulse width precompensation: optimize your experiment with no external prisms or gratings
- No manual adjustments on head
- Small optical head footprint ($\sim 30 \times 45$ cm) for Y-Fi™ and Y-Fi™ HP



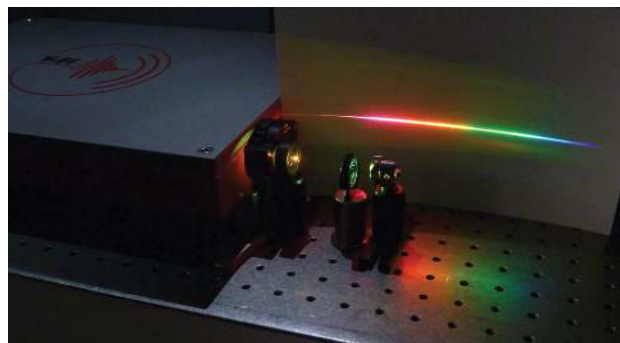
The Y-Fi™ laser series is a family of high average power, high repetition rate near-IR ultrafast fiber lasers. Y-Fi™ products are based on a single rugged opto-mechanical platform and are engineered for hands-free operation.

Y-Fi™ Outstanding Characteristics

The Y-Fi™ system employs a patented all normal dispersion (ANDi) modelocked fiber laser coupled with a fiber amplifier. This configuration offers numerous unique advantages, including:

- Bandwidth supporting sub-100 fs pulses
- High output energy from oscillator requires less amplification for shorter, low temporal pedestal pulses
- Robust long-term operation

The short, clean pulses of the Y-Fi™ laser series deliver more peak intensity per μJ than competing products. KMLabs guarantees both pulse duration and pedestal energy content, verified with a FROG pulse measurement, to ensure each laser pulse is free of picosecond background that robs energy from the main short pulse. Thus, more of the laser output is truly usable, requiring less energy/average power and decreasing the probability of seeing collateral damage and other detrimental interactions.



Bulk White-Light Generation with Y-Fi™ HP



Contact us for full specifications or with questions