YLMO-SEED

Femtosecond Fiber Seed Laser

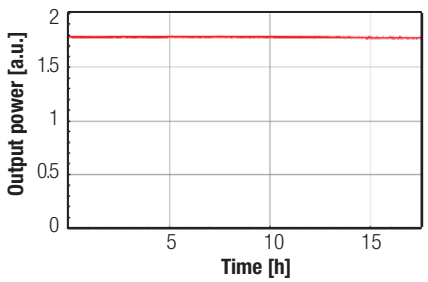
MenloSystems

Menlo Systems' Ytterbium based femtosecond fiber laser oscillator integrates the latest developments in fiber technology and incorporates these enhancements into an easy-to-use product.
Our patented figure 9® technology delivers reliable and consistent mode-locking, which is ideally suited to ensure long-term stable operation. The PM-fiber design guarantees excellent stability and low noise, even in harsh environments with high fluctuations in temperature. As a seed source for amplifiers, the YLMO-Seed offers easy integration and maintenance-free operation, engineered for 24/7 operation.

PERFORMANCE DATA

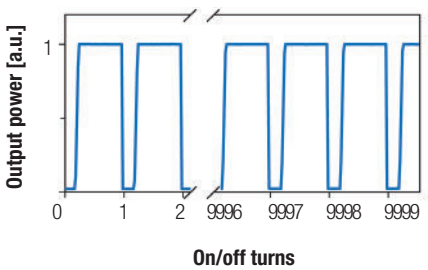
Amplitude noise

Low fluctuation in the output power of <0.5% rms, measured over 15 hours in an ambient temperature



Reliable and consistence performance

The figure shows the YLMO output during 10,000 on/off cycles. The YLMO mode-locked at each turn on.



KEY SPECIFICATIONS

- Wavelength 1030-1064 nm
- Output Power >200 mW
- Repetition Rate 30-100 MHz
- Bandwidth >15 nm

APPLICATIONS

- Amplifier Seeding

FEATURES

- figure 9® Technology
- Reliable Mode-Locking
- Long-Term Stable Operation
- Low Amplitude and Phase Noise
- All-PM Solution
- Fast Startup within 60 Seconds
- Optically Isolated Output
- Easy to Integrate

OPTIONS

- **NARROWBAND**
  Narrow spectral bandwidth available
- **VARIO**
  Factory set to a repetition frequency between 30 MHz and 100 MHz
- **MULTIBRANCH**
  Second output for seeding multiple amplifers
- **PULSE PICKING AND FAST AMPLITUDE MODULATION**

ASK US ABOUT

- Selectable center wavelength and custom spectral bandwidth

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SPECIFICATIONS

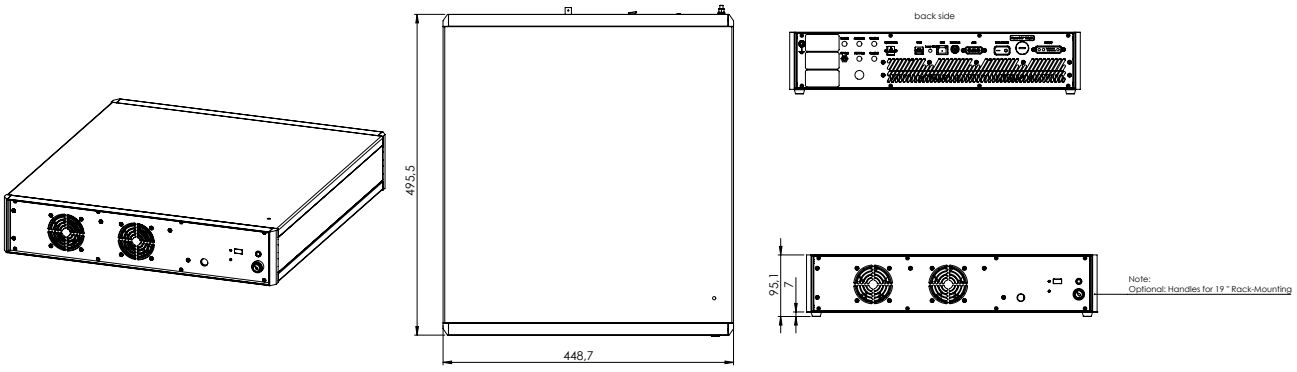
Center Wavelength	factory set between 1030 nm and 1064 nm, ± 1 nm
Spectral Width (3dB)	>15 nm, narrower bandwidth on request
Average Power	>200 mW (@ 50 MHz)
Pulse Energy	>4 nJ
Repetition Rate	factory set between 30 MHz and 100 MHz, ± 1 MHz
Pulse Width (FWHM)	chirped, supporting <150 fs
Output Port	SC/APC fiber mating sleeve
Polarization	linear, PM fiber (PER: typ >20 dB)
Pulse Picking Option (only for 50 MHz or lower)	Realized by integrated fast AOM: Mode 1: Divides repetition rate by factor 3 or higher, pulse energy stays constant. Mode 2: Can be used as fast amplitude modulator.

Please inquire for your specific combination of average power, center wavelength, spectral width, repetition rate, and also for different lengths for and types of the output fiber patch cord.

REQUIREMENTS, DIMENSIONS, INTERFACES

Operating Voltage	100/115/230 VAC, 50 to 60 Hz
Max. Power Consumption	120 W
Operating Temperature	15 °C - 35 °C
Laser Unit	19” x 2HU x 495 mm, 15 kg
Interfaces	USB, Interlock, RF-Out
Start-Up Time	<60 s

TECHNICAL DRAWING



Mechanical dimensions of the YLMO-Seed given in millimeter. Shown are the top view and the front panel.

ORDERING INFORMATION

Product Code	YLMO-SEED

Please call for pricing. Specifications are subject to change without notice. Custom modifications are available, please inquire.

Invisible laser radiation
avoid exposure to beam
Class 3B laser

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