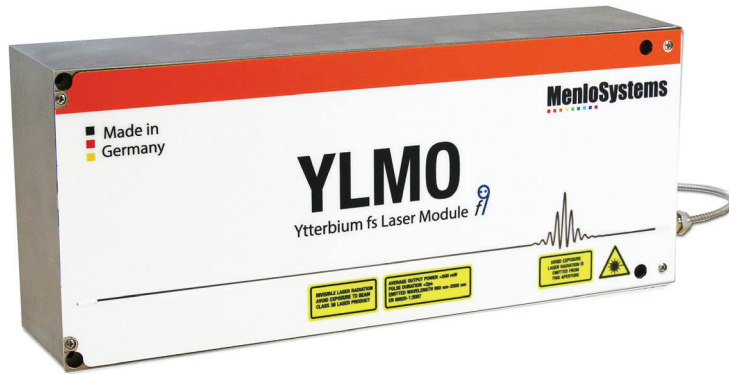


# YLMO

## Femtosecond Fiber Seed Laser



## MenloSystems

### KEY SPECIFICATIONS

- Wavelength 1030 nm
- Output Power >200 mW
- Repetition Rate 50-100 MHz
- Bandwidth >14 nm

### APPLICATIONS

- Amplifier Seeding

### FEATURES

- figure 9<sup>®</sup> 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

- **HIGH POWER**  
Seed laser with matched fiber amplifier, integrated into a 19" rack unit, output power >200 mW
- **VARIO**  
Factory-set repetition rates of 50, 80, or 100 MHz
- **MULTIBRANCH**  
Second output for seeding multiple amplifiers

### ASK US ABOUT

- Spectral bandwidth >20 nm
- Output power >2 W
- Pulse picking
- Selectable center wavelength and spectral width

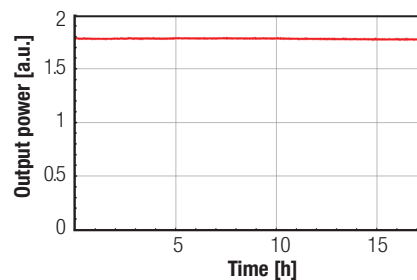
Menlo Systems' Ytterbium based femtosecond fiber laser oscillator integrates the latest developments in fiber technology and incorporates these enhancements into an easy-to-use product.

Our patented figure 9<sup>®</sup> 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 offers easy integration and maintenance-free operation, engineered for 24/7 operation.

### PERFORMANCE DATA

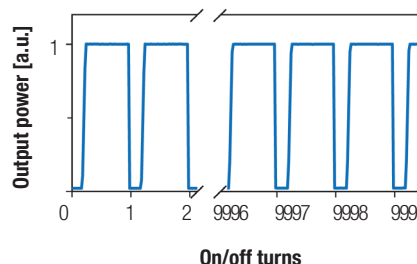
#### Amplitude noise

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.



## Femtosecond Fiber Seed Laser

SPECIFICATIONS	YLMO	YLMO HIGH POWER
Center Wavelength	1030 nm $\pm$ 5 nm	1030 nm $\pm$ 5 nm
Spectral Width (3dB)	>14 nm	>12 nm
Average Power	>5 mW	>200 mW
Pulse Energy	>0.1 nJ	>4 nJ
Repetition Rate	50 MHz (80 MHz or 100 MHz with VARIO)	50 MHz (80 MHz or 100 MHz with VARIO)
Pulse Width (FWHM)	chirped, supporting <120 fs	chirped, supporting <140 fs
Output Port	SC/APC fiber patch cord	SC/APC fiber mating sleeve
Polarization	linear, PM fiber (PER: typ >20 dB)	linear, PM fiber (PER: typ >20 dB)

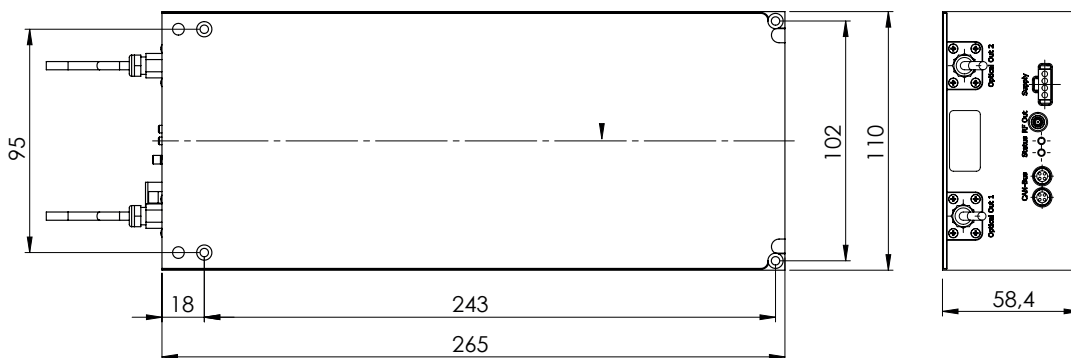
Please inquire for your specific combination of average power, center wavelength, spectral width, repetition rate, and also for different lengths for and types of the output fiber patch cord.

### REQUIREMENTS, DIMENSIONS, INTERFACES

Operating Voltage	5 VDC, 12 VDC*	100/115/230 VAC, 50 to 60 Hz
Max. Power Consumption	12 W	120 W
Operating Temperature	15 °C - 35 °C	15 °C - 35 °C
Laser Head	265 x 110 x 58 mm <sup>3</sup> , 3 kg	laser head within control unit
Control Unit	-	19" x 2HU x 495 mm, 15 kg
Interfaces	CAN, Interlock, RF-Out	USB, Interlock, RF-Out
Start-Up Time	<60 s	<60 s

\*Power supply for 100/115/230 VAC and a compact control unit with USB interface, can be provided.

### TECHNICAL DRAWING



Mechanical dimensions of the YLMO given in millimeter. Shown are the top view and the front panel. Please contact us for technical drawings for the YLMO High Power.

### ORDERING INFORMATION

Product Code	YLMO	YLMO HIGH POWER
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Please call for pricing. Specifications are subject to change without notice. Custom modifications are available, please inquire.

