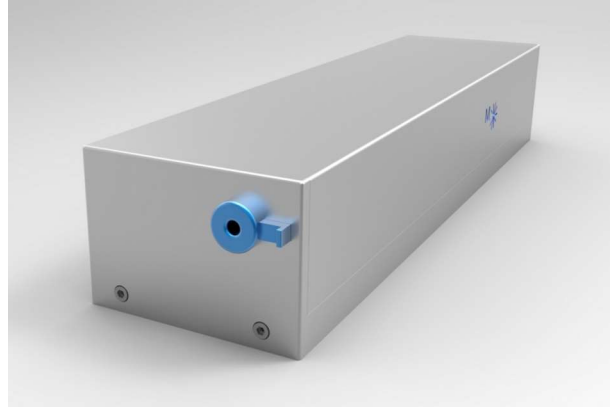




## M-FEMTO-LAB | M-PICO-LAB Ultrafast Oscillators for Your Research

Laboratory-style pico- and femtosecond modelocked oscillators.



**Description** For academic purposes, these breadboard-style picosecond or femtosecond modelocked oscillator lasers are available with different laser materials and provide pulse durations down to <100fs or up to 100 ps. This laser could become your lab engine – it is a lab-type, open-housing (user accessible) modelocked laser oscillator based on diode-pumping and semiconductor saturable absorber mirrors (SeSAMs) for modelocking. The femtosecond models implement the soliton modelocking mechanism with excellent spectral purity and clean sech<sup>2</sup>-shaped pulses. Included is a 19" rack controller with the laser diode.

**Applications**

- Seeding of laser amplifiers such as Nd:YAG, Nd:Glass or Yb lasers
- Pumping of OPOs
- Nonlinear microscopy
- Ultrafast studies
- Supercontinuum generation

**Models/Configurations**

- Ytterbium (Yb) femto- or picosecond models (1030 – 1053 nm)
- Nd:Vanadate (Nd:VAN) picosecond models (1064 nm)
- Nd:YLF picosecond models (1047 nm or 1053 nm)
- SYNC option for synchronizing with external reference clock available.
- Inquire about customizations or specifications not listed here, low rep rates, etc.

Specifications	Model	Yb [PR119, PR184]	Nd:VAN [PR132]	Nd:YLF [PR182]
Max. average output power		0.2 ~ 5 W	0.1 ~ 1 W	0.1 ~ 1 W
Wavelength (center)		1030 ~ 1053 nm	1064 nm	1047 or 1053 nm
Pulse repetition rate* (typ.)		75 MHz	85 MHz	80 MHz
Pulse duration (FWHM)		<100 fs ... 2 ps	4 ~ 100 ps	4 ~ 20 ps
Beam quality M <sup>2</sup> (typ.)		<1.15	<1.15	<1.15
Controller unit		19" rack (3 HE)	19" rack (3 HE)	19" rack (3 HE)
Electrical power requirement		Wall plug	Wall plug	Wall plug
Cooling requirement**			air or closed loop chiller	
Size (l x w x h)***			~566 x 150 x 105 mm <sup>3</sup>	

\*Inquire for other rep rates  
\*\*ambient air 20-30°C (lab conditions)  
\*\*\*not including connectors, shutter, etc.

### Dimensions

