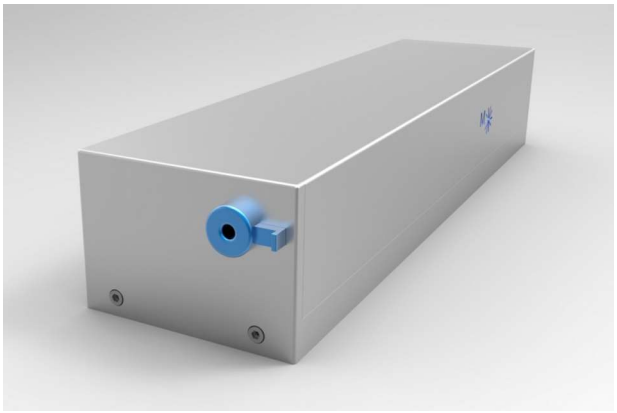
Montfort Laser™
GmbH

M-PICO-LAB Ultrafast Oscillators for Your Research

Laboratory-style picosecond modelocked laser oscillators



Description

For academic purposes, these breadboard-style picosecond modelocked oscillator lasers are available with different laser materials and provide pulse durations from 1ps up to 100 ps (depending on model). 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. Included is a 19" rack controller with the laser diode and control electronics.

Applications

- Seeding of laser amplifiers such as Nd:YAG, Nd:YVO_4 or Yb laser amplifiers
- Pumping of OPOs
- Nonlinear microscopy
- Ultrafast studies
- Supercontinuum generation

Models/Configurations

- Ytterbium (Yb) picosecond models (1030 – 1053 nm) with >=1 ps pulse duration
- Nd:Vanadate (Nd:YVO_4) picosecond models (1064 nm)
- Nd:YLF picosecond models (1047 nm or 1053 nm)
- SYNC option available for synchronizing with external reference clock.
- Inquire about customizations or specifications not listed here, low rep rates, etc.

Specifications

Model: M-PICO-LAB ...	Yb [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)	1 ps … 2 ps	4 ~ 100 ps	4 ~ 20 ps
Beam quality M^2 (typ.)	<1.15	<1.15	<1.15
Controller unit	19" rack (3 HE)	19" rack (3 HE)	19" rack (3 HE)
Electrical power requireement	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^3		

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

Dimensions