

M-PICO-LAB-REGEN Picosecond Narrowband 20μJ Nd:YVO₄ Laser

Laboratory-style amplified picosecond specialty laser with narrow optical spectrum



Description For research or academic purposes, this breadboard-style, open-housing picosecond laser is based on a Nd:YVO₄ modelocked seed oscillator which is amplified in a Nd:YVO₄ regenerative amplifier into the >10μJ energy regime at low repetition rates (1...1000 Hz). This laser is based on diode-pumping and semiconductor saturable absorber mirror (SeSAM) technology for modelocking. Included is a 19" rack controller with the laser diode and control electronics.

Applications

- Seeding of high energy or large scale laser amplifiers such as Nd:YAG, Nd:YVO₄
- Pumping of OPAs
- Frequency conversion

Models/Configurations

- Model PR197: Nd:YVO₄ based picosecond microjoule laser
- 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-REGEN	Nd:VAN [PR197]
Output Pulse Energy		> 20 μJ
Wavelength (center)		1064 nm (Nd:YVO ₄)
Output pulse repetition rate*		1 ... 1000 Hz
Seeder repetition rate		70 MHz (or specify)
Pulse duration (FWHM)		50 ps (10 ... 100 ps on request)
Beam quality M ² (typ.)		<1.5
Controller unit		19" rack (3 HE)
Electrical power requirement		Wall plug
Cooling requirement**		air or closed loop chiller
Size (l x w x h)***		~566 x 400 x 105 mm ³
*Inquire for other rep rates; internal and external triggering		
**ambient air 20-30°C (lab conditions)		
***not including connectors, shutter, screws, etc.		

Dimensions

