



M-NANO 80mJ 10Hz Nd:YAG All-in-One ns Laser [PR139]



Description Extremely compact and low-weight (<2kg) All-in-One 80-mJ-level (10Hz), pulsed Nd:YAG laser head with integrated control electronics and laser diode current driver. Generates laser pulse energies up to >80 mJ, pulse durations of <~8 ns at a pulse repetition rate of 10Hz, or lower energy at higher repetition rate.

Applications

- LIBS – laser-induced break down spectroscopy
- Laser analytics
- Non-linear optics
- Optical damage testing
- Laser amplification
- Defense
- PIV – Particle Imaging Velocimetry
- LIDAR

Models and Customization This standard product M-NANO PR139 is available with customized features upon request:

- Extended temperature ranges -20°C ... +60°C or -40°C ... +60°C
- Frequency conversion
- Burst mode
- etc.

Specifications	M-NANO 1W [PR139]
Pulse Energy	>80 mJ (@10 Hz), >50 mJ (@20Hz)
Average output power	>1 W (@20Hz)
Wavelength (center)	1064 nm
Pulse repetition rate*	0 – 20 Hz
Pulse duration (FWHM)	8 ns (+/-5 ns)
Beam quality M ² (typical)	2 ~ 3
Supply voltage	24-28 VDC
Size (l x w x h)** (incl driver)	~140 x 132 x 64 mm
Cooling requirement	provide heat sink @ 0 ... 40°C
* higher rep rates at reduced energy	
**not including connectors, shutter, screws.	

Dimensions

