

THEIA Diode-Pumped Nd: YAG Laser Series



THEIA

Diode-Pumped Solid State Laser

Applications

- I Laser shock peening
- Laser adherence testing
- Laser annealing
- Laser lift-off
- Laser cleaning
- Pumping of TeraWatt TiSa amplifiers

Features and Benefits

- High energy (Joule class) and high average power (>100 W) from the same laser beam
- Performance suited to the most demanding industrial applications
- Reliable solution to use in manufacturing process
- I Low operation and maintenance costs
- Long lasting pumping diodes

Physical characteristics

Power supply		
20.9 x 22 x 31.1 in	65 x 60 x 83 cm	
Cooling unit		
$14.6 \times 17.4 \times 28.4$ in	$37 \times 44 \times 72$ cm	
Laser Head		
63 x 11.34 x 7.4 in	160 x 28.8 x 18.8 cm	

Specifications

MODEL	THEIA
Repetition Rate (Hz)	Up to 200
Energy per pulse (mJ)	
-> At 1064 nm	≥ 1000
-> At 532 nm	≥ 700
-> At 355 nm	≥ 500
Pulse to pulse energy stability (% rms)	< 1
Typical pulse duration (ns)	10

Utilities and environment requirements

Voltage	230 VAC ± 5% Single phase	
Frequency	50 – 60 Hz	
Water Flow	> 2.7 gal/min	>10 L/min
Static pressure	43.5 – 72 psi	3 – 5 bars
Temperature	15 − 17 °C	



