

# nanio series\*

Industrial DPSS Lasers

## NANIO 1064-16-V

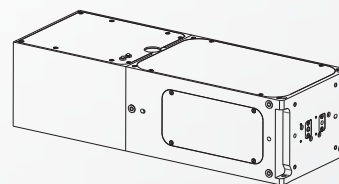
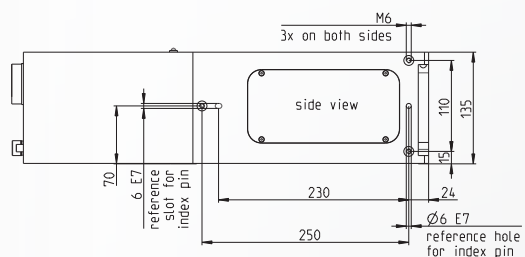
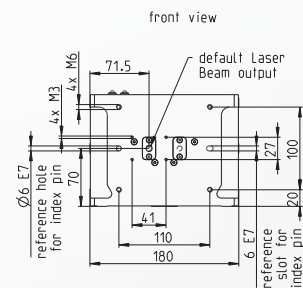
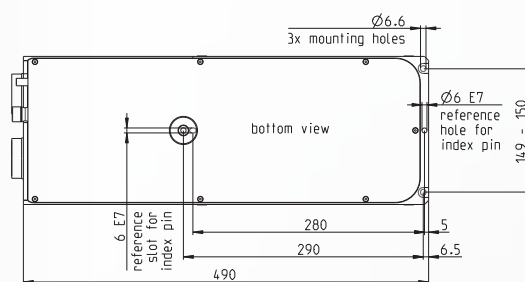


### Applications

- \* Marking
- \* Micromachining
- \* Scribing
- \* Engraving
- \* Solar Cell Manufacturing
- \* Semiconductor Manufacturing
- \* Drilling
- \* Scientific

### Features

- \* Outstanding performance & reliability
- \* Modular industrial design
- \* Easy integration and service
- \* High average power for high throughput
- \* High peak power and short pulse widths
- \* Field proven long life pump diode modules
- \* Superior pulse-to-pulse stability
- \* Optimized performance for your application



## NANIO 1064-16-V

### Specifications

Laser Head	Laser Medium	Nd:YVO <sub>4</sub>
	Pump Source	Long Life Pump Diode Modules
	Pulse Unit	Acousto-Optical Q-Switch
Laser Parameters	Wavelength [nm]	1064
	Nominal Power, CW [W]	16
	Nominal Power, Pulsed [W]	14 @ 50 kHz
	Repetition Rate [kHz]	Single Shot to 300 kHz
	Polarization	Vertical, 100:1
Beam Parameters	Spatial Mode	TEM <sub>00</sub>
	M <sup>2</sup>	< 1.2
	Peak Power [kW]	> 6 @ 50 kHz
	Pulse Energy [μJ]	280 @ 50 kHz
	Pulse Width [ns]	< 45 @ 50 kHz
	Pulse-to-Pulse Stability [rms]	< 0.5 % @ 50 kHz
	Nominal Beam Diameter at Waist [mm]	0.7
Operating Parameters	Nominal Beam Divergence, Full Angle [mrad]	2.3
	Warm-up Time	< 15 min
	Electrical Connection	115-230 VAC ± 10%, 50-60 Hz, Single Phase
	Laser Power Consumption	500 W
	Cooling	Water-to-Air or Water-to-Water
Dimensions	Ambient Temperature	15-40 °C (59-104 °F), Non Condensing
	Laser Head (L x W x H)	490 x 180 x 135 mm (19.29 x 7.09 x 5.31 in.)
Weights	Power Supply (L x W x H)	500 x 447 x 88.1 mm (19.69 x 17.6 x 3.47 in.) 19" system, 2 RU high
	Laser Head	17 kg (37.5 lbs.)
	Power Supply	12 kg (26.5 lbs.)

### Available Options

Umbilical length between laser head and power supply 1-20 m. Standard is 3 m.  
 External beam expander box, beam expanders and scan head adapter flanges.  
 Customized power supply front design.  
 Variable attenuator.

Rev. 1.1, 05/2011

InnoLas follows a policy of continuous product improvement. All specifications are subject to change without notice.  
 InnoLas Laser GmbH is DIN EN ISO 9001 certified.

