



### Description

NS-series consists of several different Q-switched Nd:YAG lasers with 1064nm output or with 532nm output (for applications like Ti:Sapphire pumping where 1064nm irradiation is unwanted). Maximum output pulse energy varies from 100mJ to 1200mJ at 1064nm.

Different kinds of power supplies and external harmonic generators are available as standard options.

### Applications

- Scientific (Ti:Sapphire and dye lasers pumping)
- Industrial (LIDAR, LIF, LIBS, LIDT)
- Medical (Tattoo removal)

### Advantages

- Rugged alignment free design
- 2Y warranty
- Easy integration with customer's system (complete RS-485 control)
- Compact size, low cost



#### Photronics Laboratories

Rm #608, Soltysa str. 187, 220070 Minsk, Belarus

Phone +375 33 340 6109, fax: +375 17 374 6109

E-mail: [info@plab.by](mailto:info@plab.by), Web: [www.plab.by](http://www.plab.by)

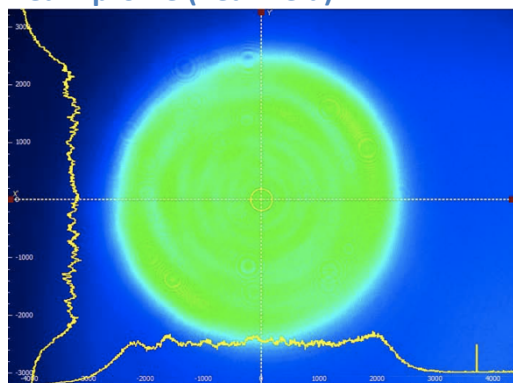
## Technical specifications (for some popular models)

	NS-1000 *	NS-500	NS-350	NS-200	NS-100
Type	Flashlamp pumped Q-switched Nd:YAG laser				
Optical scheme	Oscillator + amplifier	Oscillator only			
Wavelength	1064nm **				
Maximum pulse energy	>1000mJ	>500mJ	>350mJ	>200mJ	>100mJ
Beam diameter	8mm	8mm	6.5mm	5mm	4mm
Max. pulse repetition rate	10Hz	10Hz	10Hz	15Hz	20Hz
Pulse width	8-12ns				
Beam quality	Multimode, flat-top				
Divergence	<1.5mrad				
Polarization	Linear, horizontal				
Laser head dimensions (LxWxH)	460x90x98mm	294x150x73mm			
Laser head weight	6,0kg	5,5kg			
Power supply and cooling unit	19" rack mounted, 6U height, depth 450mm, weight 20kg Input 110/230VAC, 50/60Hz				
Interfaces	Remote control with 7" graphical display and touch panel RS-485 machine interface				

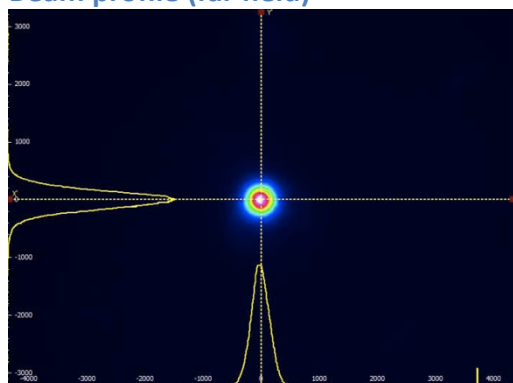
(\*) From 700mJ to 1200mJ on request

(\*\*) External SHG, THG and 4HG units are available as options

### Beam profile (near field)



### Beam profile (far field)



### Remote control, power supply and cooling units

NS-series lasers are equipped both with stand-alone UI (remote control with 7" graphical display and touch panel) and RS-485/USB machine interface. That allows both laboratory usage and integration into the customer's systems. By the same reasons power supply and cooling units are performed in 19" rack format.

### Options

- SHG, THG, FHG units, optionally with switchable wavelengths
- Cheaper modifications with reduced power (based on thinner Nd:YAG rods)
- Optionally lasers can be supplied as bare laser heads for further integration with customer's power supply and cooling system
- Custom made beam shaping units are available on request (beam homogenizers, focusing units, zoom lenses, beam attenuators, square beam generators etc)