

PICOSECOND DPSS Nd:YVO₄ LASERS

PX100 series

SOLAR LS presents a new family of high-power DPSS lasers generating laser pulses of 7 ps duration – the PX100 series. High peak and average power as well as excellent long-term radiation stability of these lasers make them an ideal tool for a wide variety of applications, from life sciences to materials processing.



The PX100 series lasers have an original optical scheme with longitudinal end-pumping and use the advanced SESAM® technology for obtaining the mode-locked regime. These solutions ensure superior TEM₀₀ beam quality and unprecedentedly short warm-up time.

The lasers of PX100 series can be easily integrated into any specialised equipment or complex measurement systems due to compact footprint, air cooling, built-in power meter module and full RS232/Ethernet interface for PC control. The lasers were developed

specifically for robust, low-maintenance operation. The cavity and nonlinear crystals of the PX100 series lasers are placed into a sealed rigid housing, thus ensuring reliable 24/7 operation.

In the standard configuration the PX110 laser is supplied with the IR output. However, upon your request it can be supplemented with harmonic generators providing high-efficiency radiation conversion into the VIS and UV region thus expanding the laser's capabilities for solving tasks in the field of nonlinear optics and laser spectroscopy.

FEATURES

- Diode-pumped solid-state design
- Hermetically sealed laser head
- Air cooled
- Turn-key operation
- Low maintenance costs

APPLICATIONS

- Time resolved spectroscopy
- Nonlinear spectroscopy
- OPO pumping
- Remote laser sensing
- Laser cutting/ablation
- LIDAR and ranging

СПЕЦИФИКАЦИЯ *

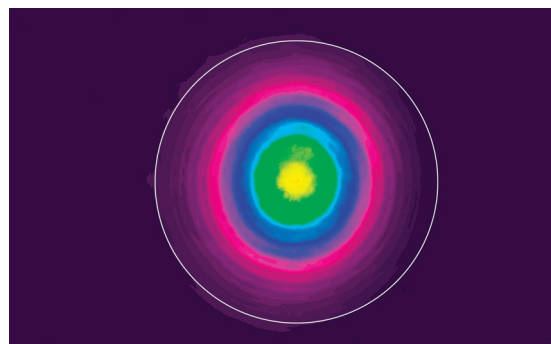
Model	PX110	PX120
Wavelength, nm	1064	532
Output power, W	≥ 6	≥ 3
Pulse repetition rate, MHz	75	
Pulsewidth ¹⁾ , ps	< 7	
Beam quality	$M^2 < 1.3$	
Beam diameter, mm	1 ± 0.1	
Cooling	Air	
Electrical service	100...240 V, 50/60 Hz, ≤ 600 W	
Dimensions, mm:		
Laser Head (LxWxH)	420 x 310 x 115	540 x 310 x 115
Power Supply (HxWxD)	460 x 330 x 135	460 x 330 x 135

* Specifications are subject to change without notice.

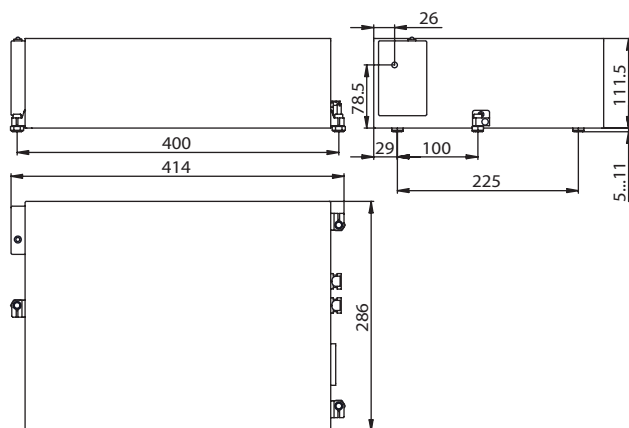
¹⁾ Specified at 1064 nm.

OPTIONS

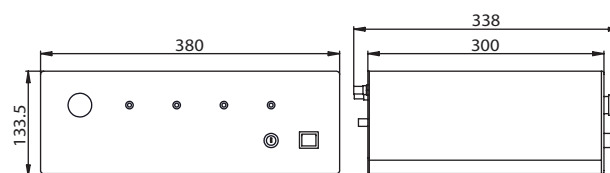
- VIS and UV harmonic generators
- Tuneable SOPO module
- External attenuator



The PX110 laser typical near-field beam profile.



The PX110 laser head outline drawing.



The PX110 laser power supply outline drawing.