

PICOSECOND DPSS LASERS

PX100 series

SOLAR LS presents a new family of high-power DPSS lasers generating laser pulses of 10 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

specially 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

SPECIFICATIONS *

Model	PX110
Output power, W	
at 1064 nm	≥ 6
at 532 nm	≥ 2.4
Pulse repetition rate, MHz	80 ± 5
Pulsewidth ¹⁾ , ps	10 ± 3
Beam quality	TEM ₀₀ ; M ² < 1.5
Beam diameter, mm	1 ± 0.1
Cooling	Air-Water
Electrical service	100...240V, 50/60 Hz, ≤ 600W
Dimensions, mm:	
Laser Head (LxWxH)	384 x 183 x 124
Power Supply (HxWxD)	410 x 420 x 170

* Specifications are subject to change without notice.

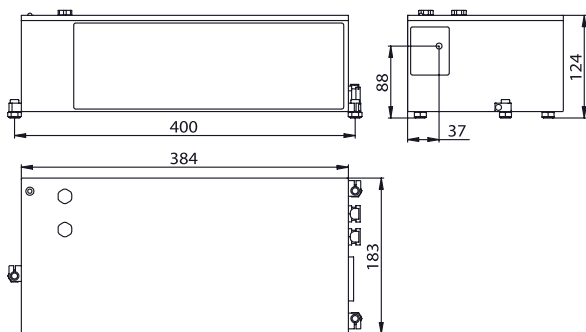
¹⁾ With external SHG.

OPTIONS

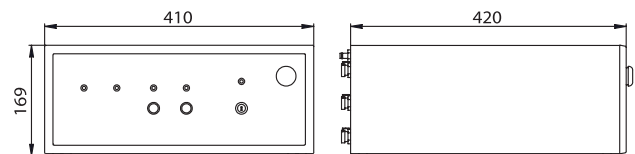
- VIS and UV harmonic generators
- Tuneable SOPO module
- External attenuator
- Frequency divider



Picosecond Laser System with VIS/UV Harmonic Generators.



The PX110 laser head outline drawing.



The PX110 laser power supply outline drawing.