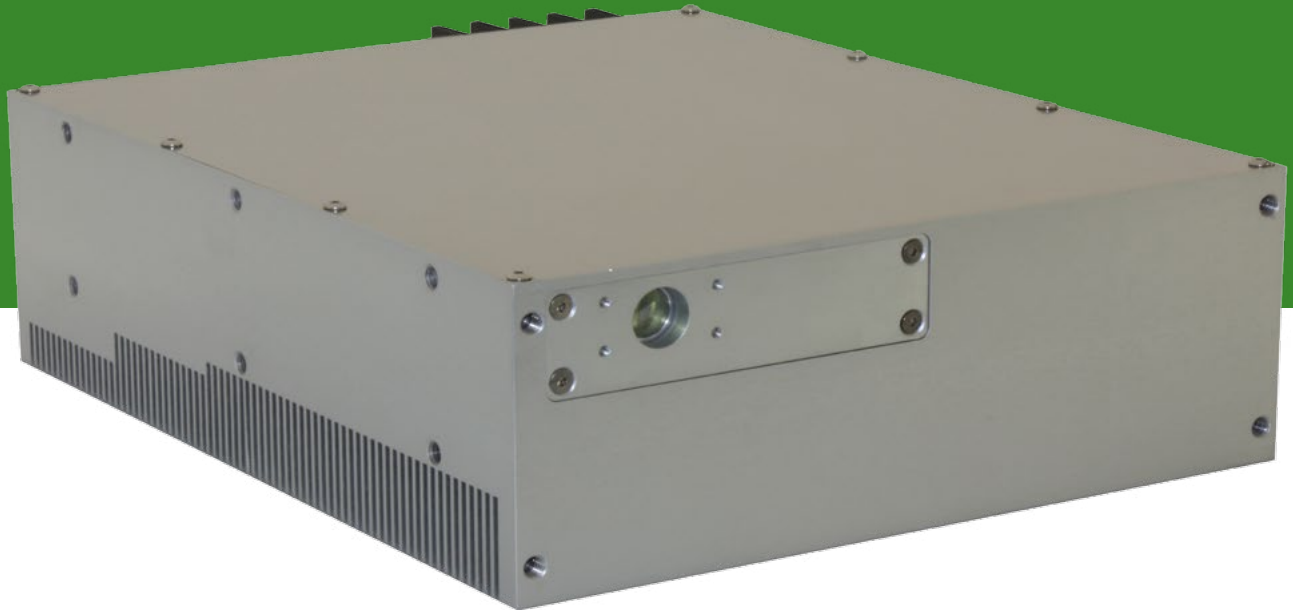


Wedge

Short Pulse Q-Switched DPSS Laser



FEATURES

Up to 4 mJ Pulse Energy

4 MW Peak Power

500 ps to 3 ns Pulse Width

Single Shot to 100 kHz

Monolithic Design

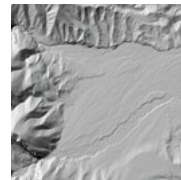
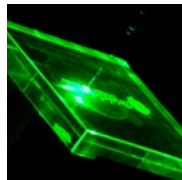
Air Cooling

Low heat waste

@1064 @532 @355 nm @ 266nm

APPLICATIONS

- » Micromachining of glass and hard materials
- » Specialty marking
- » Thin film removal
- » LIDAR
- » Non-linear spectroscopy
- » Harmonic and parametric generation
- » Visible to IR OPO pumping
- » TeraHertz generation



Wedge

Short Pulse Q-Switched DPSS Laser

Wedge family has been fully renewed in terms of performances and available models.

Wedge HB is available both at 1064nm and at 532 nm; pulse energy can reach 4 mJ in 1 ns.

Wedge-HF and Wedge-XF are now available in a very compact unit, only 8x9x19 cm, both at 1064nm and 532nm. Repetition rate can reach 100 kHz and pulses can be shorter than 500 ps.

pWedge represents a flexible platform for customized units where high power amplifiers can be added to Wedge-HF and Wedge-XF in order to fit the most demanding industrial and aerospace applications.

Based on a proprietary fast Q-Switching technology, this compact sealed and monolithic diode pumped lasers are insensitive to vibrations and harsh environments.

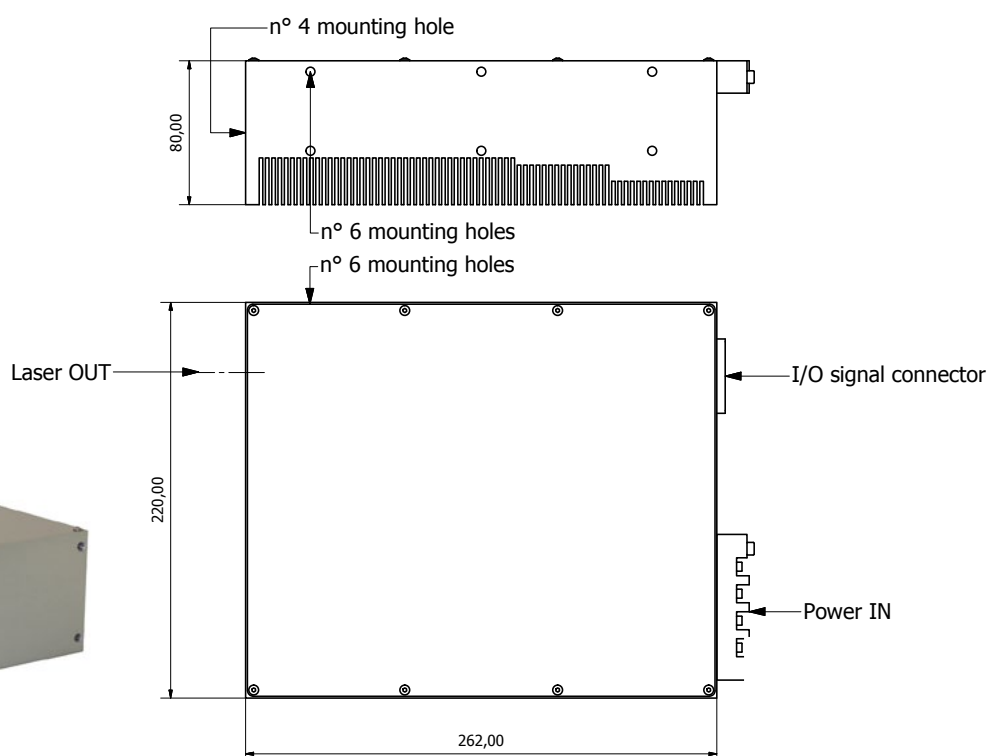
They have been designed for OEM applications like micro machining of hard and soft materials, specialty marking, glass and crystals engraving, LIDAR, LIBS, Spectroscopy and medical diagnostics. High output peak power, with relatively low energy and heat generation, allows efficient ablation and non-linear interaction with

most materials. The compact and lightweight package represents a great benefit in LIDAR and other aerospace applications, while short pulses give extremely precise time-of-flight measurements.

Second Harmonic (532 nm output) and wavelength conversion option widen the product application range.

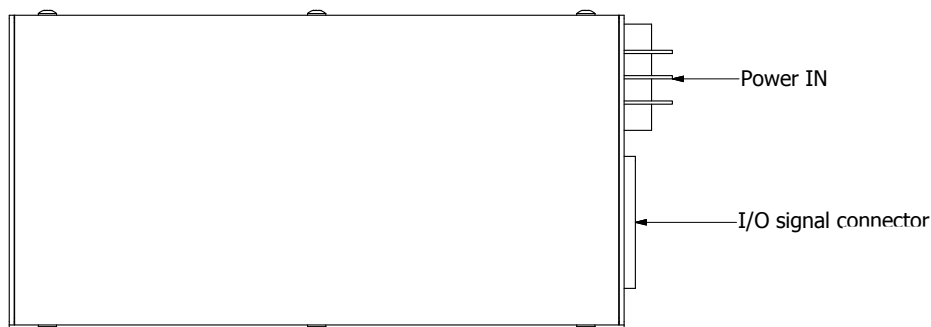
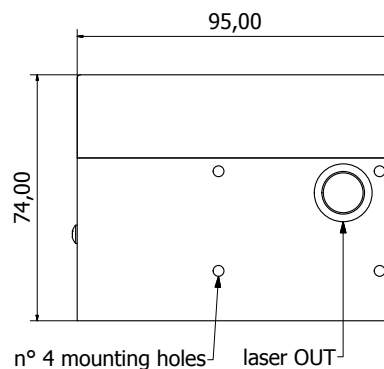
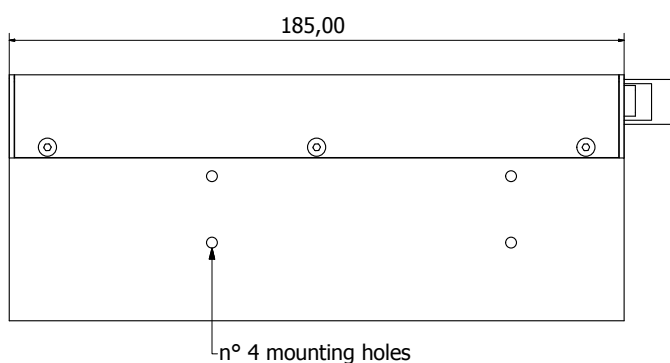
OPTIONS AVAILABLE

- » Single Longitudinal Mode
- » Beam Expanding and collimation optics
- » Red aiming beam
- » External Beam modulator
- » Circular Polarization
- » Monitoring Photodiode
- » AC-DC Power Supply
- » Harmonic generation at 355nm and 266nm
- » Parametric generation at 1.5 μ m and 3 μ m



Models	Wedge HB 1064	Wedge HB 532	Wedge XB 1064	Wedge XB 532
Pulse Energy	2mJ	1mJ	4mJ	2mJ
Wavelength	1064nm	532nm	1064nm	532nm
Pulswidth	<1.5ns			
Peak Power	Up to 2 MW	Up to 1 MW	Up to 4MW	Up to 2 MW
Q-Switch Repetition Rate	Single shot to 2 kHz		Single shot to 1 kHz	
Polarization	Linear 100:1 (option: circular polarization)			
Beam Quality (M²)	< 2			
Cooling	Air-cooled with thermostatic fan			

Models	Wedge HF 1064	Wedge HF 532	Wedge XF 1064	Wedge XF 532
Average Output Power	4W	1.5W	1W	0.5W
Wavelength	1064nm	532nm	1064nm	532nm
Pulswidth	< 700 ps to 3 ns		< 500 ps to 1 ns	
Pulse Energy	40 uJ to 180 uJ	15uJ to 80 uJ	7 uJ to 70 uJ	3uJ to 30 uJ
Peak Power	Up to 250 kW	Up to 100 kW	Up to 140 kW	Up to 60 kW
Q-Switch Repetition Rate	10 kHz to 100 kHz (option: single shot to 10 kHz)			
Polarization	Linear 100:1 (option: circular polarization)			
Beam Quality (M²)	< 1.5		< 1.3	
Cooling	Air-cooled with thermostatic fan			



All dimensions in mm

Wedge HF - Wedge XF



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Sol



Luce



Wedge



BDL & BFP

