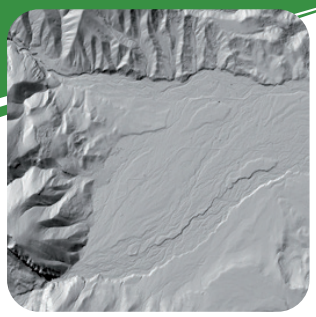
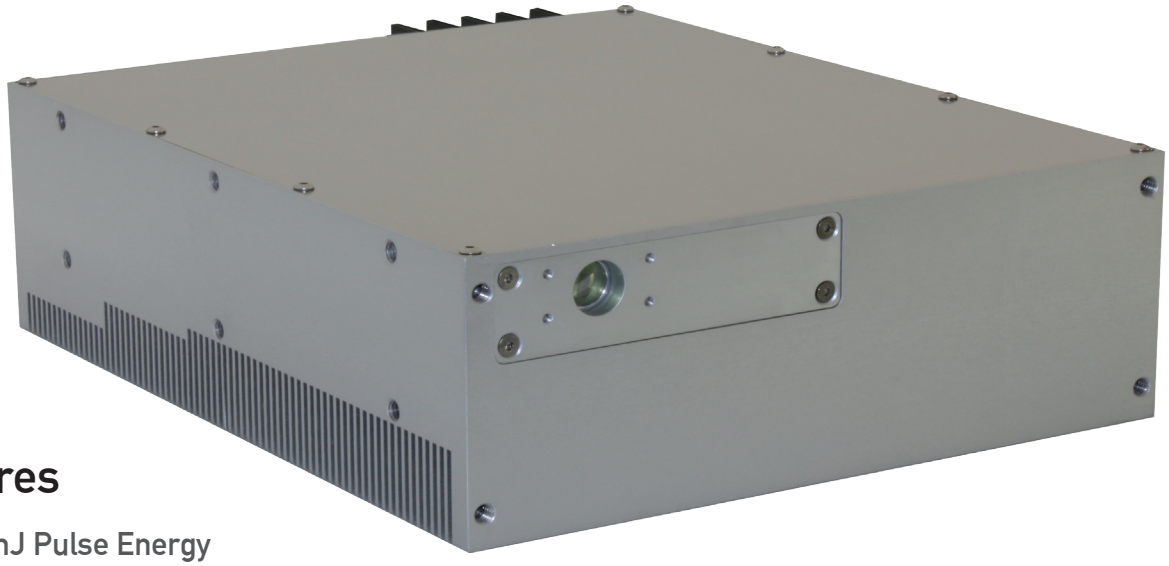
Wedge

Short Pulse Q-Switched DPSS Laser





Features

Up to 4 mJ Pulse Energy

4 MW Peak Power

400 ps to 2,5 ns Pulsewidth

Single Shot to 100 kHz

@1570 @1064 @532 @355 @266nm

MOPA configurations

Monolithic Design

Air Cooling

Low heat waste

Applications

Micromachining of glass

Specialty marking

Thin film removal

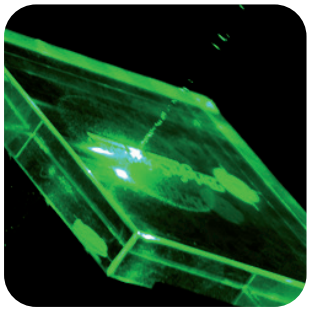
LIDAR and Bathymetry

Non-linear spectroscopy

Harmonic and parametric generation

Visible to IR OPO pumping

TeraHertz generation



BrightSolutions
SOLUZIONI LASER INNOVATIVE

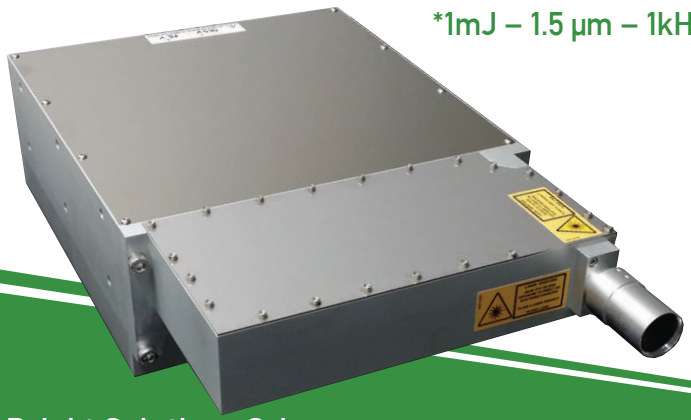
Wedge

Short Pulse Q-Switched DPSS Laser

*IP 68 MOPA configuration

In the following table the main features of standard Wedge models are presented; for a complete description of laser performances at 1570, 1064, 532, 355, 266 nm please refer to product datasheets.

1064nm Wedge models	High energy		Sub-ns	
	Wedge HB	Wedge XB	Wedge HF	Wedge XF
Max Pulse Energy	2 mJ	4 mJ	180 µJ	70 µJ
Repetition rate	Single Shot to 2 kHz	Single Shot to 1 kHz	10 kHz to 100 kHz (option: down to single shot, up to 200 kHz)	
Harmonics / Wavelength conversion	1570 nm - 532 nm – 355 nm – 266 nm			
Pulsewidth	< 1.5 ns		down to 700 ps	down to 400 ps
Peak Power	up to 2 MW	up to 4 MW	up to 250 kW	up to 175 kW
Polarization	Linear 100 : 1 (option circular polarization)			
Beam quality (M^2)	< 3.5	< 5	< 1.5	< 1.3
Cooling	Air-cooled (option: water cooling and contact cooling)			
DC Voltage IN	Dual 8 V - 15 V	Dual 12 V - 15 V	24 V	
Overall mechanical dimensions	26 x 22 x 8 cm^3 (10 x 9 x 3 in^3)	26 x 25 x 10 cm^3 (10 x 10 x 4 in^3)	19 x 10 x 8 cm^3 (7 x 4 x 3 in^3)	
Weight	< 10 kg (< 22 lbs)	< 12 kg (< 27 lbs)	< 2.5 kg (< 5.5 lbs)	



*1mJ – 1.5 µm – 1kHz Eye-safe

OPTIONS AVAILABLE:

Beam expanding and collimating optics
Fiber coupling
Low jitter option
Extended operating temperature range
Pulse energy modulation
up to IP68 Package
28 V DC Input for airborne installation
Circular polarization
Monitoring photodiode
Red aiming beam
Remote control cbox and software interface
AC-DC power supply

Bright Solutions Srl
Via Artigiani 27 27010 Cura Carpignano (Pv) Italy T (+39) 0382 583094
www.brightsolutions.it sales@brightsolutions.it