

Onda

ns Q-Switched DPSS laser



Features

Up to 1mJ pulse energy

@266nm @355nm @532nm @1064nm

2 to 10ns pulsewidth

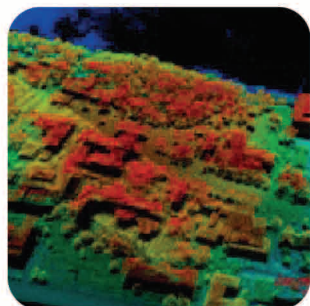
Single shot to 100kHz

MOPA configurations

Monolithic design

Air cooling

Low heat waste



Applications

Specialty marking

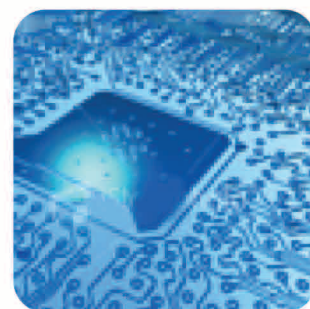
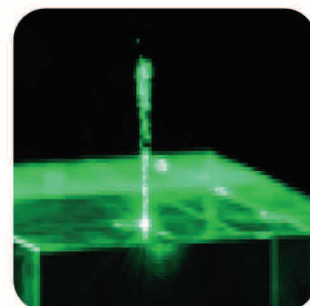
Micromachining of glass

Electronic manufacturing

LIDAR and bathymetry

Thin film removal

Hole drilling

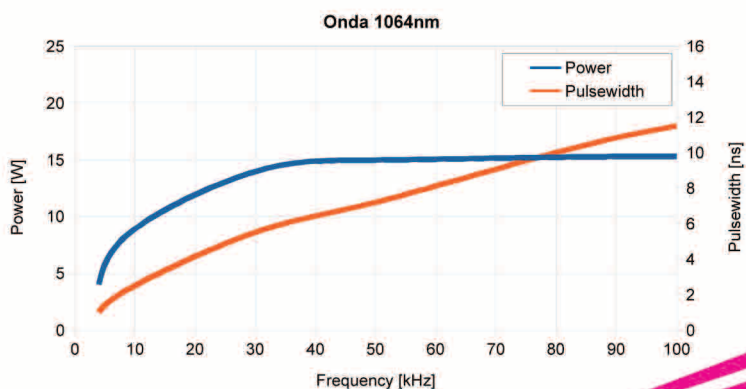
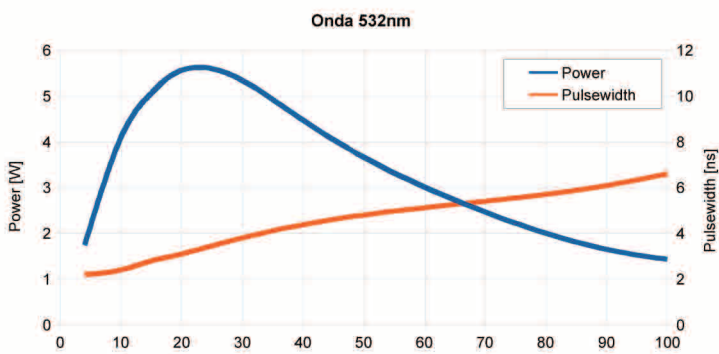
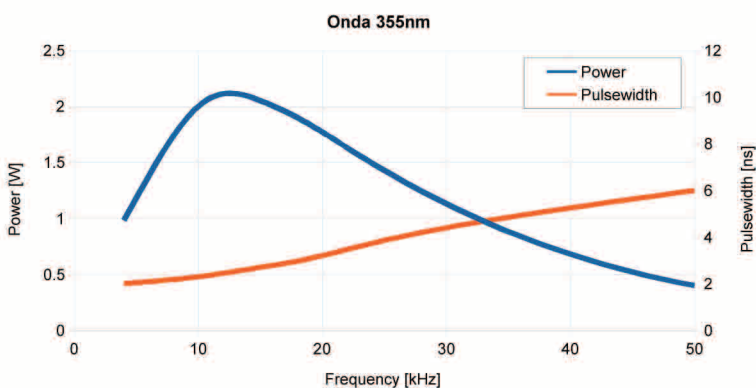
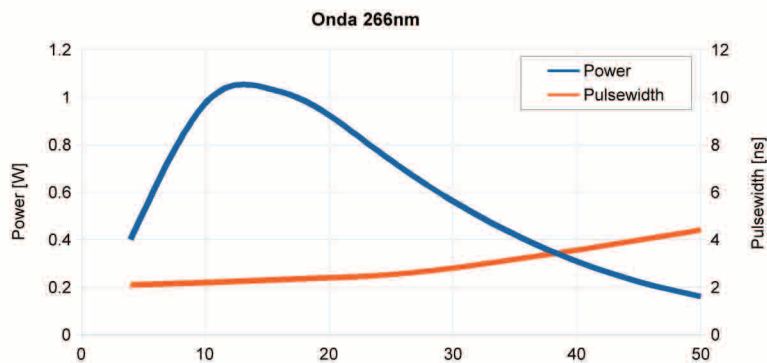


Developed as a high-energy seeder for advanced MOPA systems, Onda is the new DPSS ns-laser platform aimed to high-end applications requiring both excellent beam quality and high peak power in order to process metals, glass, plastics, delicate and hard materials.

Onda is available at four different wavelengths: 266, 355, 532 and 1064nm.

The internal optical layout and the accurate temperature management allow to get relevant pulse energy performances without compromising the lifetime of the THG and FHG stages. All of Onda models can work from single shot to 50 kHz or up to 100 kHz with a pulsewidth between 2 and 10 ns and share the same mechanical footprint and electronic interface. Compactness, insensitivity to environmental conditions and ease of handling allow superior operation flexibility and performance / cost ratio.

A new version of the digital Control Box and the new proprietary Software Interface are available for simplified remote control and monitoring.



OPTIONS AVAILABLE:

- Beam expanding and collimating optics
- Fiber coupling
- Low jitter option
- Extended operating temperature range
- Pulse energy modulation
- Circular polarization
- Monitoring photodiode
- Red aiming beam
- Remote control box and software interface
- AC-DC power supply
- Higher energy MOPA configurations

Onda ns Q-Switched DPSS laser

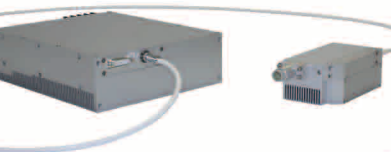


*Digital control box for simplified remote control

In the following table the main features of the standard configurations are presented.

Onda models	Onda 266nm	Onda 355nm	Onda 532nm	Onda 1064nm
Primary wavelength	266nm	355nm	532nm	1064nm
Average power	1W	2W	5W	14W
Pulse energy	100µJ	200µJ	500µJ	1000µJ
Repetition rate	Single Shot to 50 kHz		Single Shot to 100 kHz	
Pulsewidth	2 to 6ns		2 to 10ns	
Peak power	50kW	100kW	250kW	500kW
Polarization	Linear 100:1 (option:circular polarization)			
Beam quality (M ²)	< 1.3		< 1.5	
Cooling	Air-cooled (option: water cooling and contact cooling)			
DC Voltage IN	24 V			
Overall mechanical dimensions	19 x 10 x 8 cm ³ (7 x 4 x 3 in ³)			
Total weight	< 2.5 kg (< 5.5 lbs)			

Luce



Sol



Wedge



BDL - BFP



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