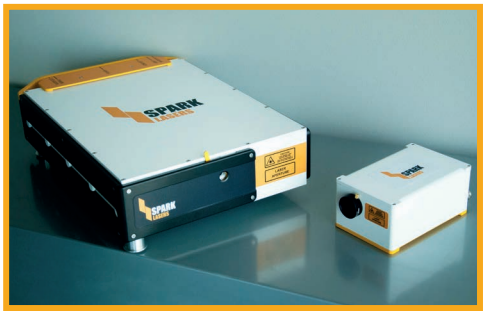
Spark Laser

Compact High-Power Picosecond Lasers

Spark Lasers provide high peak power and high repetition rate picosecond pulses in a compact and robust format. Offering a low cost of ownership, high precision and ease of integration, Spark Lasers are ideally suited for industrial applications such as thin film removal, glass engraving or drilling small apertures.



Key features

- Compact platform
- Ease of integration
- Cost effective picosecond solution
- High peak power
- High repetition rate
- Frequency conversion to 532 and 355 nm

Applications

- Laser micromachining
- Glass processing
- Thin film removal
- Medical
- Scientific

Technical specifications*

Model	Sirius-7	Vega-40	Vega-micro
Optical specifications			
Wavelength	1064 nm	1064 nm	1064 nm
Pulse duration	<10 ps	100 ps	100 ps
Max pulse energy	50µJ	40µJ	20 µJ
Repetition rate	Single pulse to 1 MHz	Single pulse to 1 MHz	600 kHz
Max. average power	7 W	40 W	12 W
M^2	<1.3	<1.3	<1.3
Pulse stability	<2% RMS	<2% RMS	<2% RMS
Polarization	Vertical >100:1	Vertical >100:1	Vertical >100:1
General characteristics			
Laser head dimensions	280 x 380 x 80 mm	300 x 300 x 80 mm	100 x 158 x 71 mm
Laser controller dimensions	19"/3U rack	19"/3U rack	19"/3U rack
Cooling	water cooled	air cooled	air cooled

** Specifications subject to change without notice. For custom specifications, please contact ALPhANOV.*

Option

- Other pulse durations
- Green output at 532 nm with >50% efficiency at nominal energy at 1064 nm
- UV output at 355 nm with >20% efficiency at nominal energy at 1064 nm

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