

## **VEGA-Micro**

#### Ultra-compact high-energy picosecond fiber laser



VEGA-Micro produces high energy 100 ps pulses at a repetition rate of 600 kHz, in a reduced size and robust format. Offering one of the world's most compact high energy picosecond lasers, VEGA-Micro is ideally suited for industrial and scientific applications.

Integrating state of the art high-power fiber amplifiers, VEGA-Micro offers remarkable spectral, temporal and spatial quality at high energy and high average power.

VEGA-Micro embeds perfectly into any kind of systems working in a 24/7 operating environment, year wide. Its very reduced footprint, weight and capital investment make it the moneymaker you need.

www.spark-lasers.com Phone: +33 564 310 484 info@spark-lasers.com

# VEGA-Micro Key Features

- 12 W at 1064 nm
- 100 ps pulse duration
- Up to 20 µJ at 600 kHz
- $M^2 < 1.2$
- Low CoO, Fast ROI
- Rugged design
- Plug-and-play
- Maintenance free
- Worldwide warranty coverage 24 months

# VEGA-Micro applications

- Thin film ablation
- Microelectronics
- Medical & Bio-Medical

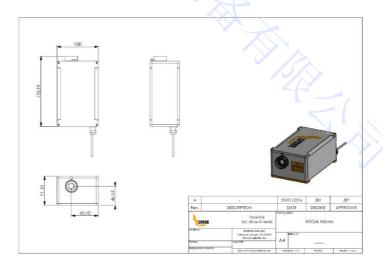
### **Technical Specifications\***

Model	VEGA-Micro-IR	VEGA-Micro-GR**
Wavelength	1064 nm	532 nm
Spectral width	< 1.6 nm	< 1.6 nm
Pulse duration <sup>1</sup>	< 120 ps	< 100 ps
Max. average power	12 W	6 W
Repetition rate <sup>2</sup>	600 kHz	600 kHz
M²	<1.2	<1.2
Beam waist diameter	1 mm	1 mm
Beam pointing	<25 µrad/°C	<25 µrad/°C
Ellipticity	>0.9	>0.9
Warm-up time <sup>3</sup>	< 15 min	< 15 min
Power stability	<2% RMS	<4% RMS
Pulse stability	<2% RMS	<4% RMS
Polarization	Vertical, >100:1	Vertical, >100:1
Power control	From 0 to 12 W	From 0 to 12 W
Laser head dimensions (mm³)	100 x 158 x 71	100 x 158 x 71
Laser controller dimensions	19"/3U rack	19"/3U rack
Standard umbilical length <sup>4</sup>	3 m	3 m
Power consumption	100 to 240 VAC < 400 W	100 to 240 VAC < 400 W
Cooling	Air cooled	Air cooled

- Other pulses durations available upon request.
- Other repetition rates ranging from 100kHz up to 1 MHz available upon request.
- From cold start. Time required to stabilize the output power at specified RMS Power stability.
- Can be upgraded up to 10 in, seem
  Specifications subject to change without notice.

  Subject to change without notice. Can be upgraded up to 10 m, contact us for more details.
- \*\* Other wavelengths available upon request

For custom specifications, please contact us.



SPARK LASERS offers a 24-month warranty for all VEGA-MICRO laser range. For full details of this warranty coverage, please refer to our website www.spark-lasers.com or contact us at +33 564 310 484



**Batiment IOA** Rue François Mitterrand 33400 Talence **FRANCE** 

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