

VGEN-ESP Fiber Laser

MOBILE / EYE SAFE PULSED FIBER LASER FOR LIDAR AND RANGE-FINDINGS APPLICATIONS

The VGEN-ESP Advantage

- Up to 5 W average output power
- Up to 15 kW peak power
- Tunable pulse width down to 3 nsec
- 35 – 500 kHz (tunable) repetition rate
- Optional collimators with variety of output beam diameters
- Very short pulse width for higher measurement resolution
- High PRF enables higher scanning and data acquisition rates



Incorporating state-of-the-art laser technology, Spectra Physics Tel-Aviv's VGEN-ESP lasers provide top performance in technically demanding LIDAR and range-finding applications.

Spectra Physics Tel-Aviv's VGEN-ESP series of Erbium fiber lasers in MOPA configuration offers clients a constant high peak power over a wide range of pulse repetition rate values for stable high performance.

Offering high beam quality, low beam divergence, high peak power and high pulse energy, Spectra Physics Tel-Aviv's lasers are competitively priced yet offer the full range of specifications to meet a wide range of LIDAR and range finding applications.

With low weight and small size, the VGEN-ESP series is easily deployed. Housed in a robust assembly that meets industrial standards and fitted with a metal armored fiber cable, VGEN-ESP lasers deliver a high quality, near diffraction-limited output beam. The VGEN-ESP's solid construction is maintenance free and reliable, ensuring long-life operation at low operational cost.

Spectra Physics Tel-Aviv's VGEN-ESP lasers are rugged and can stand up to the tough conditions and requirements of airborne and mobile LIDAR applications for a robust, stable platform.

Short Pulse, 3 ns¹



1. Typically measured performance; not a guaranteed or warranted specification.

Applications

- LIDAR and LADAR
- Range finding
- Mobile LIDAR applications

VGEN-ESP Fiber Laser

Specifications¹

	VGEN-ESP-2	VGEN-ESP-5
Operational Mode	Short Pulse	
Wavelength	1550 ±2 nm (other options available)	
Average Output Power	2 W	5 W
Repetition Rate	35–500 kHz	
Pulse Width	3 ns ±0.5 ns	
Peak Power (Max)	15 kW	
General Characteristics		
Operational Voltage	12, 24 VDC optional	
Operating Temperature	5–40°C	
Dimensions	45 × 120 × 75 mm	
Weight	2.3 kg	
Wall-Plug Efficiency	>8%	
Fiber Length	50 cm	
Output Fiber Collimator	6 ±1 mm diameter (other options available)	
Output Beam Parameters	M ² <1.3	

1. Due to our continuous improvement, all specifications are subject to change without notice.

About Spectra-Physics Tel Aviv

Spectra-Physics Tel-Aviv develops, manufactures and markets high quality innovative laser systems for a wide range of industrial applications. The company's laser systems are the product of extensive experience and the cutting-edge know-how that Spectra-Physics Israel's professional team has developed over the years.

In the industrial field, the company develops and manufactures pulsed Ytterbium, Thulium, Erbium, Green and UV fiber-lasers for such applications as micromachining, fine processing and marking. Spectra-Physics Tel-Aviv's short pulse versions are also implemented in LIDAR and range-finding.



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