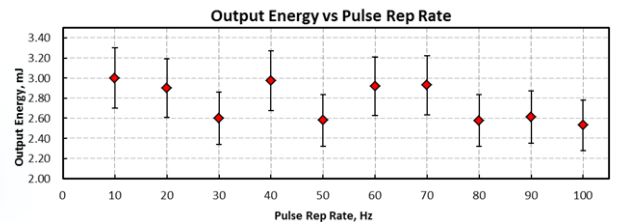




ELPN-1645-SF Series

Er:YAG Single-frequency Nanosecond Pulsed Lasers

NEW PRODUCT



Typical Output Energy vs Pulse Repetition Rate of Single-frequency ELPN-1645-SF Series Laser

Applications

- ▶ LIDAR/Remote Sensing
- ▶ Medical Applications
- ▶ Plastics Processing
- ▶ OPO Pump Source

Features

- ▶ Output Power up to 15 W
- ▶ Variable Pulse Width
- ▶ Pulse Energy 1- 3 mJ
- ▶ TEM₀₀ Beam Mode
- ▶ Repetition Rate 0.01 - 10 kHz
- ▶ Power Amplification Option

IPG Photonics' ELPN-SF Erbium:YAG single-frequency nanosecond pulsed laser provides 10-40 ns pulses at 1.645 μm with pulse energies up to 3 mJ and output powers up to 10 W. The acousto-optically q-switched Er:YAG head is pumped by IPG's efficient and reliable erbium fiber laser. The Er:YAG-1645-SF pulsed laser addresses lidar remote sensing, range-finding, non-metal materials processing, scientific and medical applications. Higher average powers, higher pulse energies and other options are available upon request. Please contact your IPG Representative with your requirements.

ELPN-1645-SF Series

Er:YAG Single-frequency Nanosecond Pulsed Lasers

Optical Characteristics

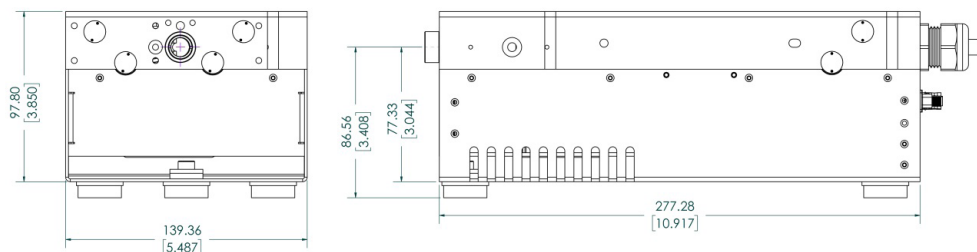
Mode of Operation	Acousto-optically Q-switched
Wavelength, nm	Tunable over 1645-1646
Linewidth FWHM, nm	<1 GHz
Max. Average Power, W	10
Peak Power, kW	600
Max. Pulse Energy*, mJ	3
Pulse Duration, ns	5-50
Repetition Rate**, kHz	0.01-10
Polarization	Linear, >100:1
Output Beam Mode, M ²	≤1.2
Beam Diameter (FW, 1/e ²), mm	1.5
Warm-up Time, min	5 from Standby, 15 from Cold Start

* Output energies >3 mJ are available upon request

** Custom repetition rates are available upon request

General Characteristics

Pump Laser Dimensions (W × D × H), mm	448 × 403 × 132
Optical Head Dimensions (W × D × H), mm	140 × 277 × 97
Pump Laser Cooling	Air-cooled
Optical Head Cooling	Water-cooled
Supply Voltage 50-60 Hz, VAC	110-240
Power Consumption, W	100-800



+1 (205) 307-6677

sales.us@ipgphotonics.com

www.ipgphotonics.com

Legal notices: All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind IPG only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with use of a product or its application. IPG, IPG Photonics, The Power to Transform and IPG Photonics' logo are trademarks of IPG Photonics Corporation. © 2015-19 IPG Photonics Corporation. All rights reserved. Protected by US patents 6,960,486; 7,548,571 and applicable licenses.

MAX. AVERAGE OUTPUT POWER: 20 W
 MAX. PEAK OUTPUT POWER: 200 MW
 PULSE DURATION: 5-50 ns
 PULSE REPETITION RATE: 0.01-10 kHz
 WAVELENGTH RANGE: 1600-1700 nm

DANGER - INVISIBLE LASER
 RADIATION AVOID EYE OR SKIN
 EXPOSURE TO DIRECT OR
 SCATTERED RADIATION
 CLASS 4 LASER PRODUCT

IEC 60825-1:2014

The Power to Transform®