

CLPN and CLPNT Series

Nanosecond Pulsed Cr:ZnSe/S Lasers

Fixed Frequency or Tunable
Air-cooled Optical Head



Applications

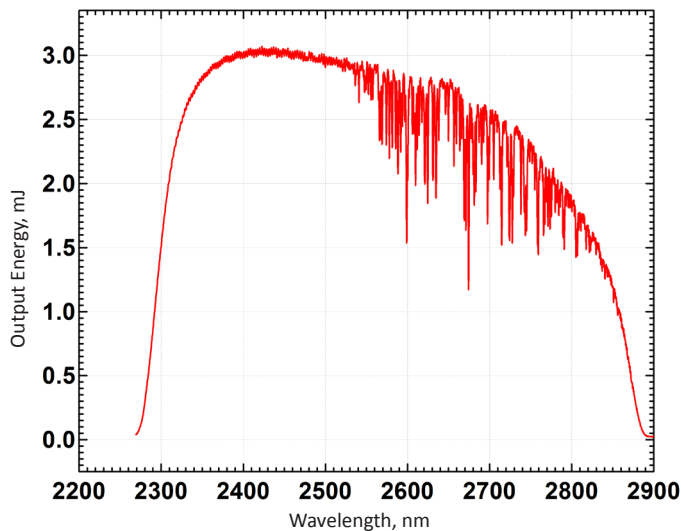
- ▶ Medical Applications
- ▶ Industrial Process Control
- ▶ Environmental Monitoring
- ▶ Materials Processing



Features

- ▶ Selectable Wavelength 2.3-3.0 μm
- ▶ Pulse Duration 5- 15 ns
- ▶ Pulse Energy > 3 mJ
- ▶ Excellent Beam Quality
- ▶ Repetition Rate 0.1- 1 kHz
- ▶ Compact and Low Cost

Tuning Curve of Pulsed Cr:ZnSe Laser



IPG Photonics offers CLPN and CLPNT Cr:ZnSe/S pulsed nanosecond Mid-IR lasers. Customer can select a fixed frequency or tunable model in the 2.3 - 3.0 μm wavelength range. These lasers provide pulse energy up to 3 mJ, a pulse duration range of 5 - 15 ns and a pulse repetition rate up to 1 kHz. The Cr:ZnSe/S lasers are pumped by IPG Photonics' efficient and reliable thulium fiber laser. CLPN and CLPNT pulsed Mid-IR lasers are used for materials processing, environmental monitoring and medical applications.

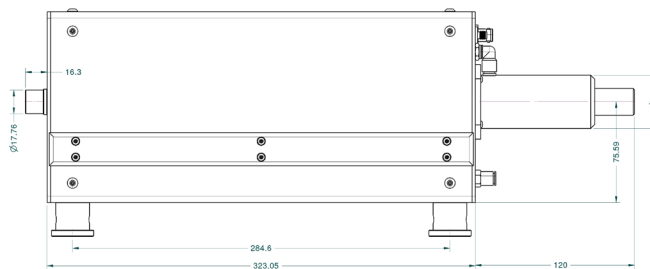
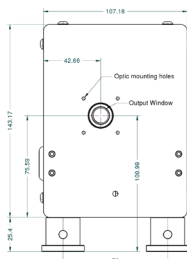
CLPN and CLPNT Series

Nanosecond Pulsed Cr:ZnSe/S Lasers

Optical Characteristics	CLPN	CLPNT
Mode of Operation	Pulsed	
Central Wavelength	fixed, customer selected 2.3 - 3.0 μm	tunable, 2.3 - 3.0 μm
Max Average Power, W	3	
Pulsed Energy, mJ	1 - 3	
Pulse Duration, ns	5 - 15	
Repetition Rate, kHz	0.1 - 1.0	
Polarization	Random or Linear	Linear, Horizontal, > 100:1
Beam Mode Quality, M^2	TEM_{00}	
Beam Diameter (FW, $1/e^2$), mm	< 2	
Warm up Time, min	5 from standby, 15 from cold start	

General Characteristics	IPG Photonics CW Tm Fiber Laser
Pump Laser	IPG Photonics CW Tm Fiber Laser
Pump Laser Dimensions (WxDxH), mm	448 x 403 x 132
Optical Head Dimensions (WxDxH), mm	107 x 323 x 143
Optical Head Cooling	Air
Supply Voltage 50-60 Hz, VAC	110 - 240
Power Consumption*, W	200 typ.

*Electrical power consumption depends on the maximum output energy of the system.

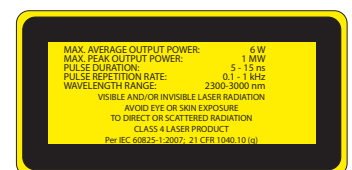


+1 (205) 307-6677

sales.us@ipgphotonics.com

www.ipgphotonics.com/midIR

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. © 2012 - 2015 IPG Photonics Corporation. All rights reserved. Protected by US patents 5,541,948; 6,960,486; 7,548,571 and applicable licenses.



The Power to Transform®