

DTL-413

Diode-pumped, Solid-state, Continuous Wave, Green Lasers



✓ FEATURES

- Perfect beam quality, TEM₀₀
- Power adjustment
- High stability of output power
- Low optical noise
- Superior beam pointing stability
- PC control through RS-232 interface
- CDRH-compliant or OEM configurations
- Fiber sleeve on laser head front panel for MM fiber coupling (optional)
- RoHS compliance
- Vertical polarization (optional)

✓ YOUR BENEFITS

- Up to 1.5 W in green
- > 20,000 hours lifetime
- Adjustment of output power from 5 to 100% while keeping high-stable operation
- Cost effectiveness

✓ APPLICATIONS

- Various types of spectroscopy
- Fluorescence microscopy
- Hi-tech R&D
- Laser light shows & displays
- Crystal inspection
- Test & measurement equipment

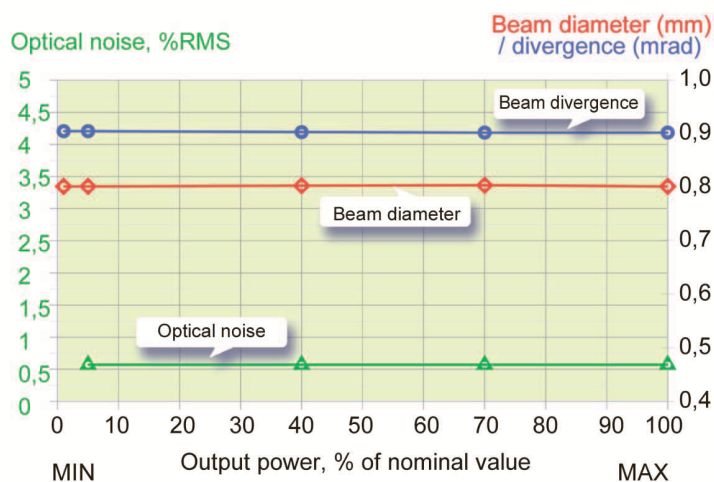
The DTL-413 is a continuous wave, diode-pumped, solid-state laser with output at 527 nm wavelength - in green spectrum range. Versions with output power 200, 350, 500, 1000 or 1500 mW are available.

The lasers feature low optical noise level (typically < 0.6 per cent rms) and superior stability of output power in a wide operating temperature range (< 0.5 per cent rms). Other features include high beam quality with round, nearly diffraction-limited beam and excellent pointing stability. MM fiber coupling is available upon request.

The lasers have flexible PC control through RS-232 interface. Customers can change the output power from 0 to 100%. PC-controlled and manual output power adjustment enables selecting the required level of output power according to the application.

Due to innovative solutions in proven design the lasers keep stable characteristics independent on ambient temperature and set level of output power*. Unlike chip-based technology, the DTL-413 cavity design enables stable quality and reliability of the lasers irrespective of order quantity.

* - within operating range



Laser-compact group
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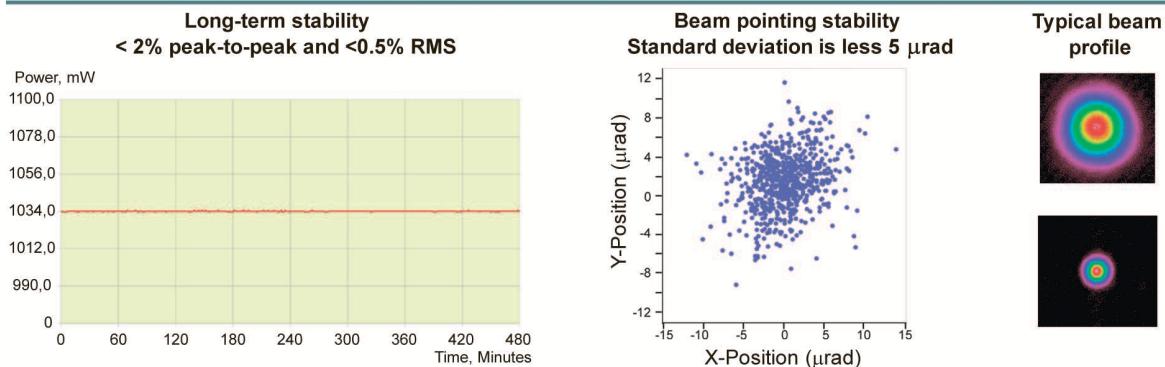
Specifications¹

DTL-413

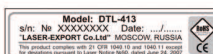
Wavelength	527 nm				
Output Power (nominal value), mW	200	350	500	1000	1500
Mode of Operation	CW				
Output Power Stability (over 8 hrs)	< 0.5 % RMS, ≤ 2% peak-to-peak				
Optical Noise (RMS, 10Hz ÷ 20MHz)	≤ 1%				
Output Power Adjustment (of nominal value, via RS-232)	7.5 - 100 %	4.5 - 100 %	3 - 100 %	1.5 - 100 %	1-100%
Transverse Mode	TEM ₀₀ , M ² ≤ 1.1				
Beam Diameter (1/e ² , at output aperture), mm	0.8 ± 0.1				
Beam Divergence (full angle, 1/e ²), mrad	≤ 1				
Beam Ellipticity	≤ 1.11:1				
Polarization Linearity	≥ 200:1, horizontal (≤ 2°)				
Beam Pointing Stability, Std. dev	≤ 5 μrad/hour at constant temperature; ≤ 9 μrad/°C				
Beam Static Alignment Tolerance	≤ 0.5 mm				
Beam Angular Alignment Tolerance	≤ 5.0 mrad				
Warm-Up Time	≤ 5 min				
Operating Voltage					
with AC/DC adapter	90 to 264 VAC				
without AC/DC adapter	10.8 to 13.2 VDC				
Power Consumption, typ/max	≤ 30/60 W		≤ 35/65 W		
Operating Temperature/ Humidity Range	15 ÷ 40°C/ up to 80% humidity, non-condensing				
Dimensions, mm					
Laser Head	241 x 90 x 55 mm				
Power Supply	190 x 27 x 91 (115 with key) mm				
Laser Class (CDRH)	IIIb		IV		

Notes

- Specifications are subject to change without notice



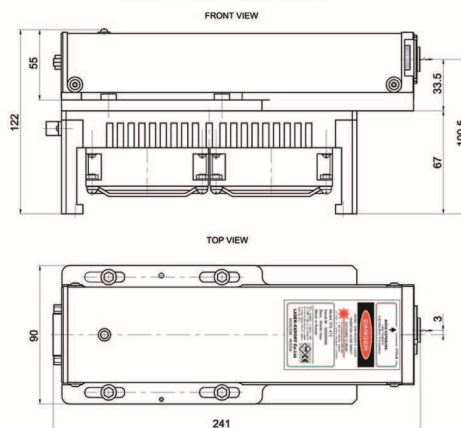
DANGER - LASER RADIATION WHEN OPEN
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION



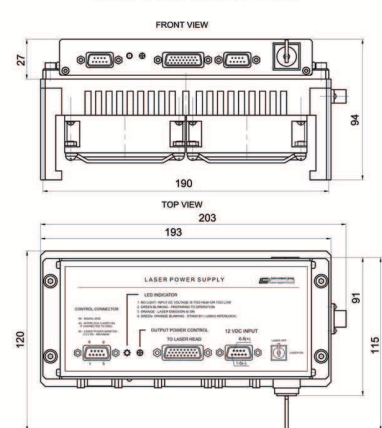
ISO 9001:2008
certified



Laser Head with Fan Heat Sink



Power Supply with Fan Heat Sink



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