



CW Diode Laser System (Infrared) DLN Series

Data Sheet



Overview

The DLN series is a family of infrared diode lasers that can deliver up to 12000 mW output power. The laser series is available in six wavelengths at 808nm, 975nm, 980nm, 1470nm, 1532nm, and 1550nm and features high power, compact design, long operating lifetime, easy operation, and FDA-compliant system with driver. The laser is widely used in measurement, spectrum analysis, communication, and many other applications.

Features

- Wide portfolio of six different infrared wavelengths
- CW operating mode
- Optical output power 50mW to 12000mW
- Ultra-compact design
- FDA compliant

Applications

- Measurement
- Spectrum analysis
- Communication

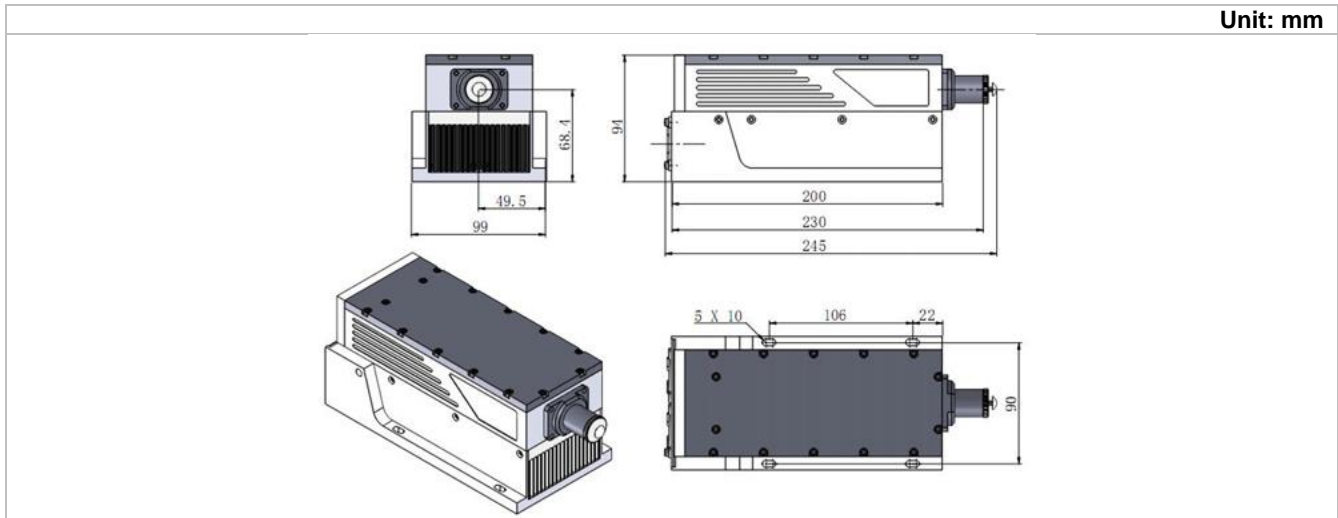
808-1550 nm Specifications

Parameter	DLN808	DLN975	DLN980	DLN1470	DLN1532	DLN1550
Wavelength	808 nm	975 nm	980 nm	1470 nm	1532 nm	1550 nm
Wavelength tolerance	±3 nm	±5 nm	±5 nm	±10 nm	±10 nm	±10 nm
Output power	>1000 mW, >2000 mW, >5000 mW, >8000 mW, >10000 mW, >12000 mW	>8000 mW, >10000 mW	>8000 mW, >10000 mW	>2000 mW, >3000 mW, >3500 mW	>2000 mW, >3000 mW, >3500 mW	>1500 mW, >2000 mW, >3000 mW, >3500 mW
Operating mode	CW	CW	CW	CW	CW	CW
Transverse mode	Multimode	Multimode	Multimode	Multimode	Multimode	Multimode
Power stability (rms, over 4 hours)	<2%, <1%, <0.5%	<2%, <1%, <0.5%	<2%, <1%, <0.5%	<2%, <1%, <0.5%	<2%, <1%, <0.5%	<2%, <1%, <0.5%
M ² factor	<20	<20	<20	<20	<20	<20
Beam diameter at aperture (1/e ²)	5-8 mm	5-8 mm	5-8 mm	5-8 mm	5-8 mm	5-8 mm
Beam divergence, full angle	<3.0 mrad	<3.0 mrad	<3.0 mrad	<3.0 mrad	<3.0 mrad	<3.0 mrad
Warm-up time	<5 min					
Operating temperature	10-35°C					
Modulation option	TTL/Analog: 1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz					
Expected lifetime	10,000 hours					
Warranty period	10 months					

Remarks:

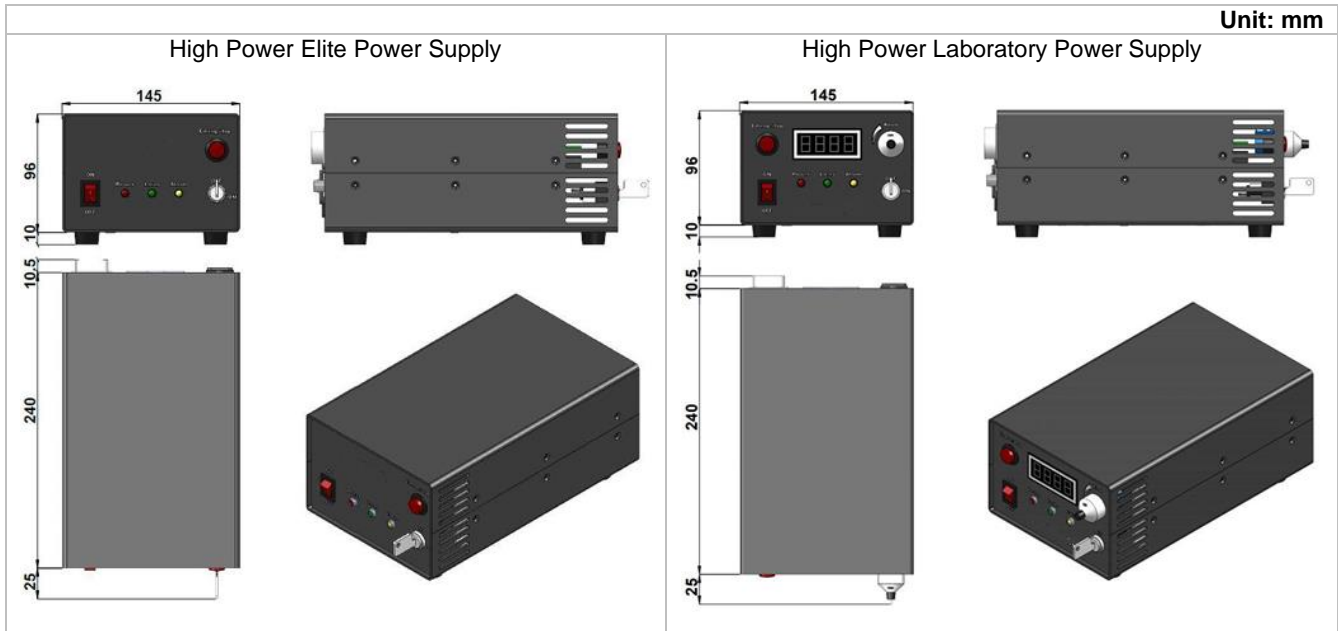
- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.
- Specifications are subject to change without notice.

DLN Series Laser Head Dimensions



Parameter	DLN Series
Dimensions	245(L)x99(W) x94(H) mm ³
Weight	2.6 kg
Beam height from base plate	68.4 mm

Power Supply Dimensions



Parameter	High Power Elite Power Supply	High Power Laboratory Power Supply
Dimensions	275.5(L) x145(W) x106(H) mm ³	275.5(L) x145(W) x106(H) mm ³
Weight	2.5 kg	2.5 kg
Input voltage	90-264VAC	90-264VAC
Feature	Standard	Adjustable power

Ordering Information

For more information, please contact Lasermate directly at sales@lasermate.com.

Part Number Configuration DLN[1][2][3][4][5]					
DLN = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability	[5] = Modulation
		1W= >1000mW 1H= >1500mW 2W= >2000mW 3W= >3000mW 3H= >3500mW 5W= >5000mW 8W= >8000mW 10W= >10000mW 12W= >12000mW	H=High Power Elite Power Supply M=High Power Laboratory Power Supply	2=<2% D=<1% S=<0.5%	0=None T1=TTL 1Hz-1kHz T2=TTL 1kHz-10kHz T3=TTL 10kHz-30kHz A1=Analog 1Hz-1kHz A2=Analog 1kHz-10kHz A3=Analog 10kHz-30kHz

Note: The above specifications are subject to change without notice.