



Fan-less CW DPSS Laser System (Infrared) DPFN Series (IR)

Data Sheet



Overview

The DPFN infrared series is a family of near infrared diode pumped solid state (DPSS) lasers at 912nm and 1357nm that can deliver up to 1000 mW output power. The laser series features compact design, long lifetime, easy operating, cost-effectiveness, and FDA-compliant system with driver. The laser is widely used in measurement, scientific research, spectrum analysis, and many other applications.

Features

- Near infrared at 912nm and 1357nm
- CW operating mode
- Optical output power 50mW to 1000mW
- Ultra-compact design
- FDA compliant

Applications

- Measurement
- Spectrum analysis
- Scientific research

912-1357 nm Specifications

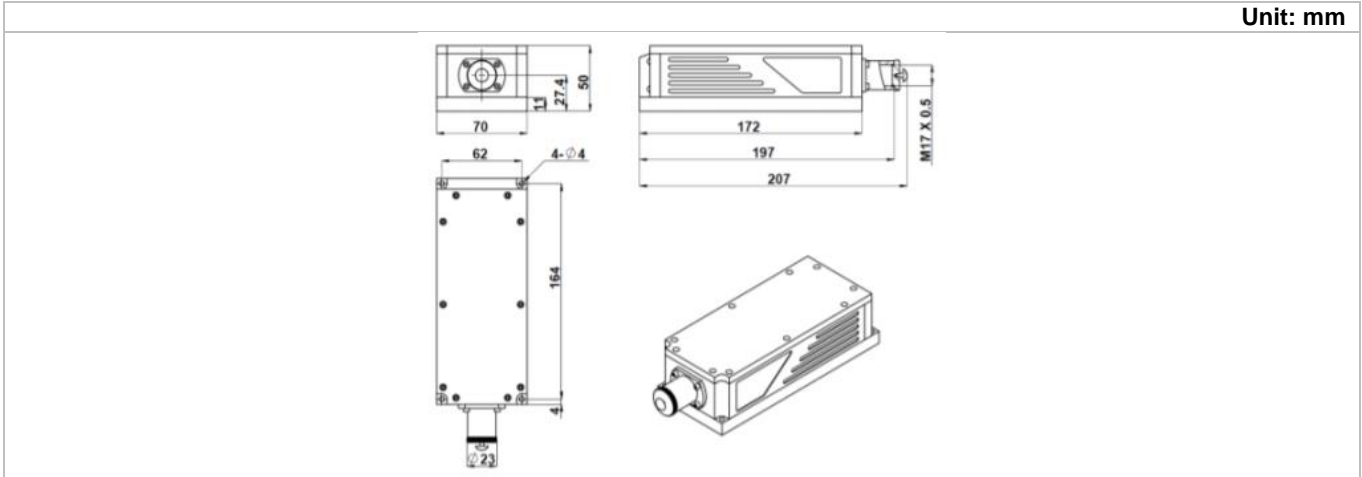
Parameter	DPFN912	DPFN1357
Wavelength	912±1 nm	1357±1 nm
Output power	>100 mW, >200 mW, >300 mW, >400 mW, >500 mW, >800 mW, >1000 mW	>50 mW, >100 mW, >200 mW, >300 mW, >400 mW
Transverse mode	Near TEM ₀₀	Near TEM ₀₀
Operating mode	CW	CW
Power stability (rms, over 4 hours)	<5%, <3%, <2%	<5%, <3%, <2%
Beam diameter at aperture	<1.5 mm	<1.5 mm
Beam divergence, full angle	<1.2 mrad	<1.2 mrad
M ² factor	<2.0	<2.0
Polarization ratio	>100:1, Horizontal	>100:1, Horizontal
Warm-up time	<5 min	<5 min
Pointing stability after warm-up	<0.05 mrad	<0.05 mrad
Operating temperature	10-35°C	10-35°C
Modulation option	TTL/Analog: 1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz	TTL/Analog: 1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz
Expected lifetime	10,000 hours	10,000 hours
Warranty period	10 months	10 months

Remarks:

- The laser head needs to be used on a heat sink with good heat dissipation.
- 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.

DPFN Series (IR) Laser Head Dimensions

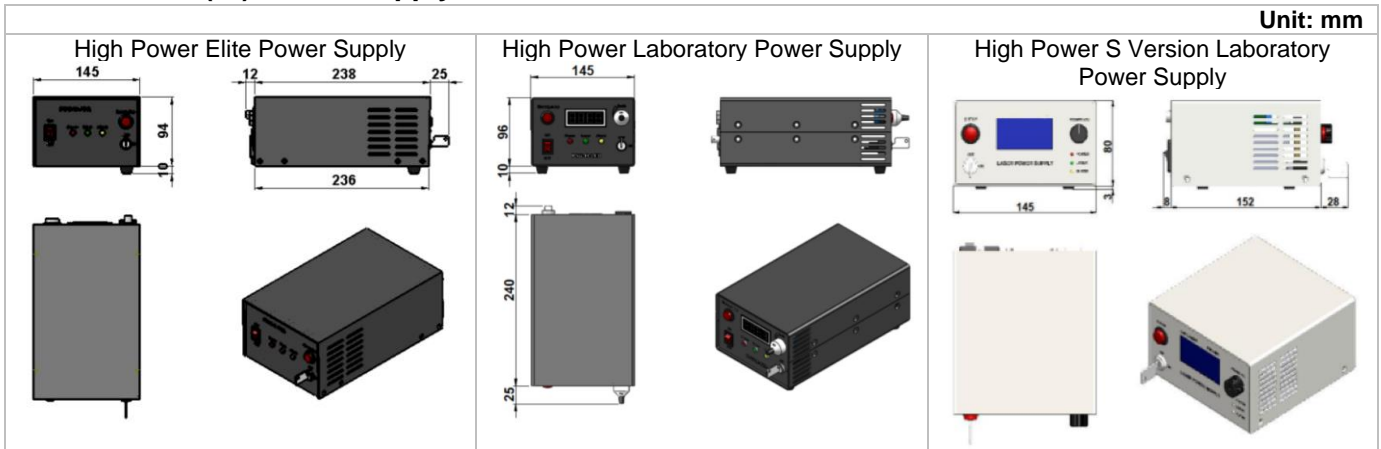
Unit: mm



Parameter	DPFN (IR) Series
Dimensions	197(L)x70(W) x50(H) mm ³
Weight	1.5 kg
Beam height from base plate	27.4 mm

DPFN Series (IR) Power Supply Dimensions

Unit: mm



Parameter	High Power Elite Power Supply	High Power Laboratory Power Supply	High Power S Version Laboratory Power Supply
Dimensions	275(L) x145(W) x104(H) mm ³	277(L) x145(W) x106(H) mm ³	188(L) x145(W) x83(H) mm ³
Weight	2.3 kg	2.6 kg	1.2 kg
Input voltage	90-264VAC	90-264VAC	90-264VAC
Feature	Standard	Adjustable power	Adjustable power

Ordering Information

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

Part Number Configuration DPFN[1][2][3][4][5]					
DPFN = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability	[5] = Modulation
		50= >50mW 100= >100mW 200= >200mW 300= >300mW 400= >400mW 500= >500mW 800= >800mW 1W= >1000mW	H= High Power Elite Power Supply M= High Power Laboratory Power Supply S= High Power S Version Laboratory Power Supply	A=<5% E=<3% 2=<2%	0=None T1=TTL 1Hz-1kHz T2=TTL 1kHz-10kHz T3=10kHz-30kHz A1=Analog 1Hz-1kHz A2=Analog 1kHz-10kHz A3=10kHz-30kHz

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