



DPH1040 Series 1040nm CW DPSS Laser System up to 100mW

Overview

The DPH1040 series diode pumped solid state (DPSS) laser is ideal for applications that require a wavelength of 1040nm and output power levels up to 100mW. The laser features a compact design, long lifetime, easy operation, and FDA-compliant system with driver. The laser is widely used in scientific experiment, optical instrument, optical sensor, measurement, communication, spectrum analysis, and many other applications.



Specifications

| | | |
|---|---|---|
| Model Number | DPH1040-XYZQ | |
| Wavelength (nm) | 1040±1 | |
| Output power (mW) | >50 (X=50), >100 (X=100) | |
| Laser crystal | Yb: YAG | |
| Transverse mode | TEM ₀₀ | |
| Operating mode | CW | |
| Power stability (rms, over 4 hours) | <5% (Z=A), <3% (Z=E) | |
| M ² factor | <1.2 | |
| Beam diameter at aperture (1/e ² , mm) | ~3.0 | |
| Beam divergence, full angle (mrad) | <2.0 | |
| Polarization ratio | >3:1 (Arbitrarily degree) | |
| Warm-up time (minutes) | <10 | |
| Pointing stability after warm-up (mrad) | <0.05 | |
| Beam height from base plate (mm) | 29 | |
| Operating temperature (°C) | 10-35 | |
| Dimensions of laser head (mm) | 154.5(L)x77(W) x60(H) mm ³ | |
| Weight of laser head (kg) | 0.9 kg | |
| Power supply options | | |
| High Power Elite Power Supply (Y=H) | Input voltage | 90-264VAC |
| | Dimensions | 275(L) x145(W) x104(H) mm ³ |
| | Weight | 2.3 kg |
| | Notes | Fixed output power |
| High Power Laboratory Power Supply (Y=M) | Input voltage | 90-264VAC |
| | Dimensions | 277(L) x145(W) x106(H) mm ³ |
| | Weight | 2.6 kg |
| | Notes | Adjustable output power |
| Modulation option | None (Q=0) | |
| | TTL | 1Hz-1kHz (Q=T1), 1kHz-10kHz (Q=T2), 10kHz-30kHz (Q=T3) |
| | Analog | 1Hz-1kHz (Q=A1), 1kHz-10kHz (Q=A2), 10kHz-30kHz (Q=A3) |
| Expected lifetime (hours) | 10,000 | |
| Warranty period | 10 months | |
| FDA Compliance | FDA CDRH Title 21 CFR 1040.10/11 Class IIIb | |

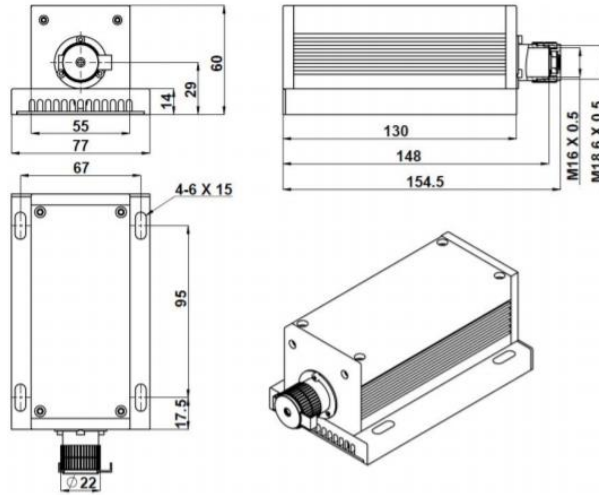
Remarks:

- 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.



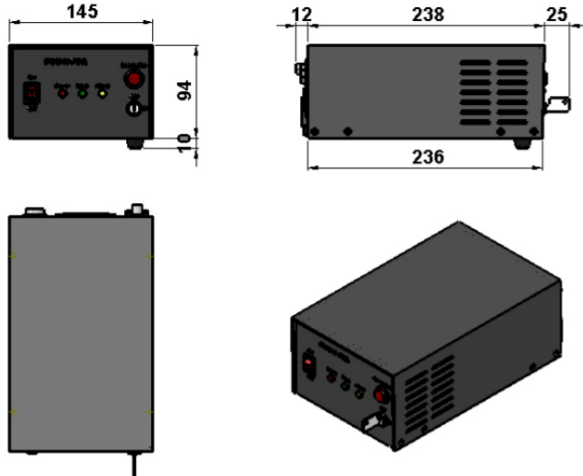
Outline Dimensions (unit: mm)

Laser Head



Power Supply Options

High Power Elite Power Supply (Y=H)



High Power Laboratory Power Supply (Y=M)



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