



Triple-Wavelength Detachable-Fiber Laser Module 638nm / 808nm / 980nm with 400 μ m Core Fiber



638nm-808nm-980nm LASER-MODULE

- o Triple-Wavelength, Single-Fiber Output
- o 638nm – 808nm – 980nm Output
- o Fiber-Coupled, 400 μ m Core
- o SMA905 Detachable Fiber Connector
- o Integrated Fiber Sensor
- o Integrated Monitor Photodiode, Thermistor



**LASER
DIODE
SOURCES**

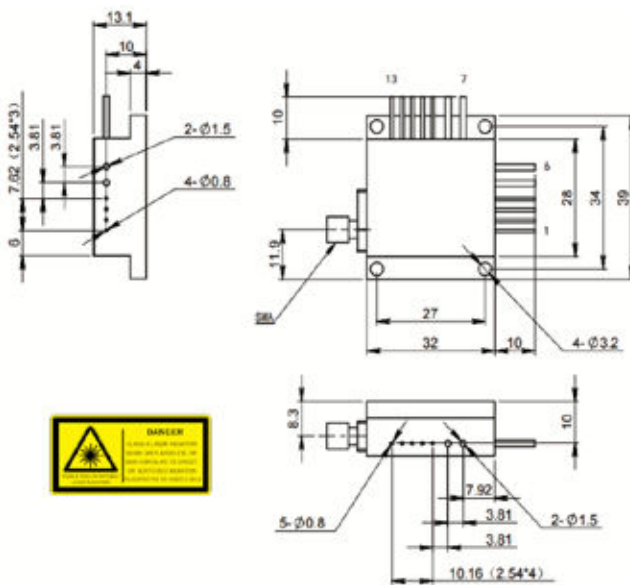


TRIPLE-OUTPUT FIBER-COUPLED MEDICAL LASER MODULE

These triple-wavelength laser modules output laser light at 638nm, 808nm, and 980nm, coupled into a single 400µm detachable fiber output. For operational safety a fiber detector LED is included in the module, as well as a thermistor and monitor photo diode.

The rugged 13-pin package is designed for long operating lifetime, and with proper mounting and temperature control will deliver stable performance in a wide range of applications.

DIMENSIONS AND PINOUT



3-wavelength			
Pin	Function	Pin	Function
1	Thermistor	9	Aiming Beam LD (-) [GND]
2	Thermistor	10	Aiming Beam LD (+) [DC 5V Input]
3	PD(N)	11	Fiber Detector PD(P)
4	PD(p)	12	Fiber Detector LED(+); Fiber Detector PD(N)
5	980nm Laser (+)	13	Fiber Detector LED(-)
6	980nm Laser (-)		
7	808nm Laser (+)		
8	808nm Laser (-)		

SPECIFICATIONS - 638NM-808NM-980NM OPTICAL SPECIFICATIONS

- CW Output Power, 638nm: 0.2 W
- CW Output Power, 808nm: 8 W
- CW Output Power, 980nm: 10 W
- Wavelength Tolerance: ± 10 nm
- Spectral Width: < 6 nm
- Wavelength Drift with Temperature: 0.3 nm / $^{\circ}\text{C}$

ELECTRICAL SPECIFICATIONS

- Specifications for 638 nm / 808 nm / 980 nm
- Threshold Current (A): 0.2 / 1.4 / 0.7
- Operating Current (A): 0.8 / 11 / 18
- Operating Voltage (V): 2.2 / 2.0 / 1.9
- Slope Efficiency (W / A): 0.7 / 0.9 / 0.9
- PD Parameter: $< 2000 \mu\text{A}$
- Thermistor R_t ($\text{k}\Omega/\beta$ (25°C)): 10 $\pm 5\%$ / 3450

FIBER SPECIFICATIONS

- Fiber Core Diameter: 400 μm
- Fiber Cladding Diameter: 440 μm
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- Numerical Aperture: 0.22
- Connector SMA905

GENERAL SPECIFICATIONS

- Operating Temperature: $10^{\circ}\text{C} - 30^{\circ}\text{C}$
- Operating Relative Humidity: $< 75\%$
- Storage Temperature: $-20^{\circ}\text{C} - 70^{\circ}\text{C}$
- Storage Relatively Humidity: $< 90\%$
- Lead Soldering Temp: 250°C max, 10 sec

PRODUCT SALES AND SERVICE:

Unlimited phone and email support is provided for products purchased through Laser Lab Source. Orders for this product are fulfilled by Laser Lab Source in North America and select international regions. It is manufactured by Real-Light, Beijing.

PRODUCT WARRANTY:

This product is sold with a full one-year warranty. It is warranted to be free from defects in material and/or workmanship for a period of one year from the date of shipment.



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