



Triple-Wavelength Detachable-Fiber Laser Module 450nm / 638nm / 980nm with 400 μ m Core Fiber



450nm-638nm-980nm LASER-MODULE

- o Triple-Wavelength, Single-Fiber Output
- o 450nm – 638nm – 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**

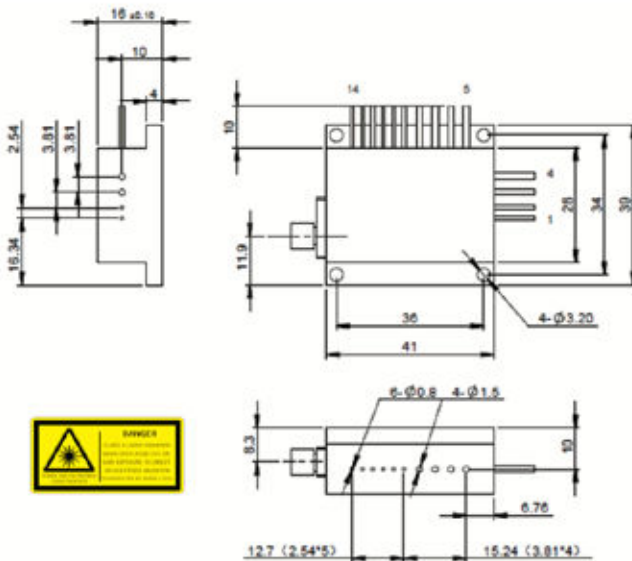


TRIPLE-OUTPUT FIBER-COUPLED MEDICAL LASER MODULE

These triple-wavelength laser modules output laser light at 450nm, 638nm, 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 14-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	PD(P)
2	Thermistor	10	638nm Laser(-)
3	980nm Laser(+)	11	638nm Laser(+) PD(N)
4	980nm Laser(-)	12	Fiber Detector PD(P)
5	-	13	Fiber Detector LED(+); Fiber Detector PD(N)
6	-	14	Fiber Detector LED(-)
7	450nm Laser(-)		
8	450nm Laser(+)		

SPECIFICATIONS

OPTICAL SPECIFICATIONS

- CW Output Power, 450nm: 3 W
- CW Output Power, 638nm: 0.2 W
- CW Output Power, 980nm: 10 W
- Wavelength Tolerance: ±10 nm
- Spectral Width: < 6 nm
- Wavelength Drift with Temperature: 0.3 nm / °C

ELECTRICAL SPECIFICATIONS

- Specifications for 450 nm / 638 nm / 980 nm
- Threshold Current (A): 0.4 / 0.2 / 0.7
- Operating Current (A): 3 / 0.8 / 18
- Operating Voltage (V): 4 / 2.2 / 1.9
- Slope Efficiency (W / A): 0.9 / 0.7 / 0.9
- PD Parameter: < 2000 µA
- Thermistor Rt (kΩ/β (25°C)): 10 ±5% / 3450

FIBER SPECIFICATIONS

- Fiber Core Diameter: 400 µm
- Fiber Cladding Diameter: 440 µm
- Fiber Cladding Diameter: 720 µm
- Numerical Aperture: 0.22
- Connector SMA905

GENERAL SPECIFICATIONS

- Operating Temperature: 10°C – 30°C
- Operating Relative Humidity: < 75%
- Storage Temperature: -20°C – 70°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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