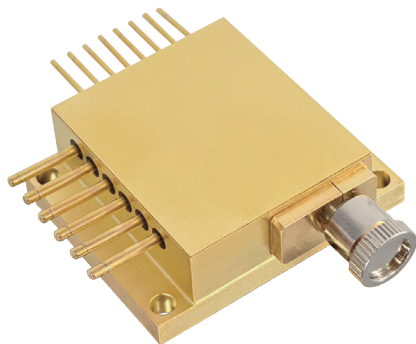




R3M High Power Diode Laser Components

R3M diode laser components are Reallight's AW series multi-function laser modules, providing multi-wavelength output with 3 emitters integrated. These fiber detachable lasers are equipped with fiber detector, photodiode and thermistor.

Key Features

- ◆ Superior power stability
- ◆ Excellent beam quality
- ◆ Efficient heat dissipation
- ◆ High reliability
- ◆ Different-wavelength combinations available

Applications

Spectroscopic Detection
Biomedicine
Material Analysis
Display&Lighting
Laser Manufacturing

Technical Specifications (25°C)

Package Type		R3M					
		3-wavelength			3-wavelength		
Center Wavelength (nm)		650	808	9XX / 1064	650	980	1470
Optical	CW Output Power / P _{op} (W)	0.5	10	15 / 10	0.5	15	4
	Wavelength Tolerance (nm)	±10					
	Spectral Width / Δλ (nm)	<6					
	Temperature Drift of Wavelength / Δλ/ΔT (nm/°C)	0.3					
Electrical	Threshold Current / I _{th} (A)	0.5	1.8	1 / 1.2	0.5	1	1.4
	Operating Current / I _{op} (A)	1.2	13	18 / 13	1.2	18	14
	Operating Voltage / V _{op} (V)	2.3	2	1.8 / 1.8	2.3	1.8	1.5
	Slope Efficiency / η _{es} (W/A)	0.7	0.9	0.9 / 0.8	0.7	0.9	0.3
	PD Parameter / I _{pd} (μA)	<8000					
	Thermistor / Rt (kΩ/β (25°C))	10±1%/3930					
Fiber	Fiber Core Diameter / dcore (μm)	400					
	Fiber Cladding Diameter / Dclad (μm)	440					
	Fiber Coating Diameter / Dbuffer (μm)	720					
	Numerical Aperture / NA	0.22					
	Connector	SMA905					

1. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.

Other Parameters

Parameter	Operating Temperature /°C	Operating Relative Humidity /%	Storage Temperature /°C	Storage Relative Humidity /%	Lead Soldering Temperature (max/°C)
Min	10	-	-20	-	-
Max	30	75	70	90	250(10Sec.)

