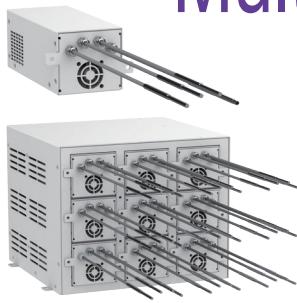


AWSO-B Series Multi-Wavelength Multi-Channel Diode Laser Module



The AWSO-B series multi-wavelength multi-channel diode laser module is equipped with RealLight's self-developed single-mode fiber-coupled diode laser and multi-channel driver circuits. This module comes with standard I/O interfaces for easy integration into user's host system, delivering highly stable multi-wavelength laser output. RealLight also provides customization of fibers, lenses, and handpieces to meet your application needs.

Key Features

- Modular design, up to 36 output channels
- Custom control and software services available
- Single-mode fiber output with high uniformity
- Multi-wavelength combination available
- Compact, plug and play

Applications

- Spectroscopic Detection
- Biomedicine
- Material Analysis
- Display & Lighting
- Laser Manufacturing

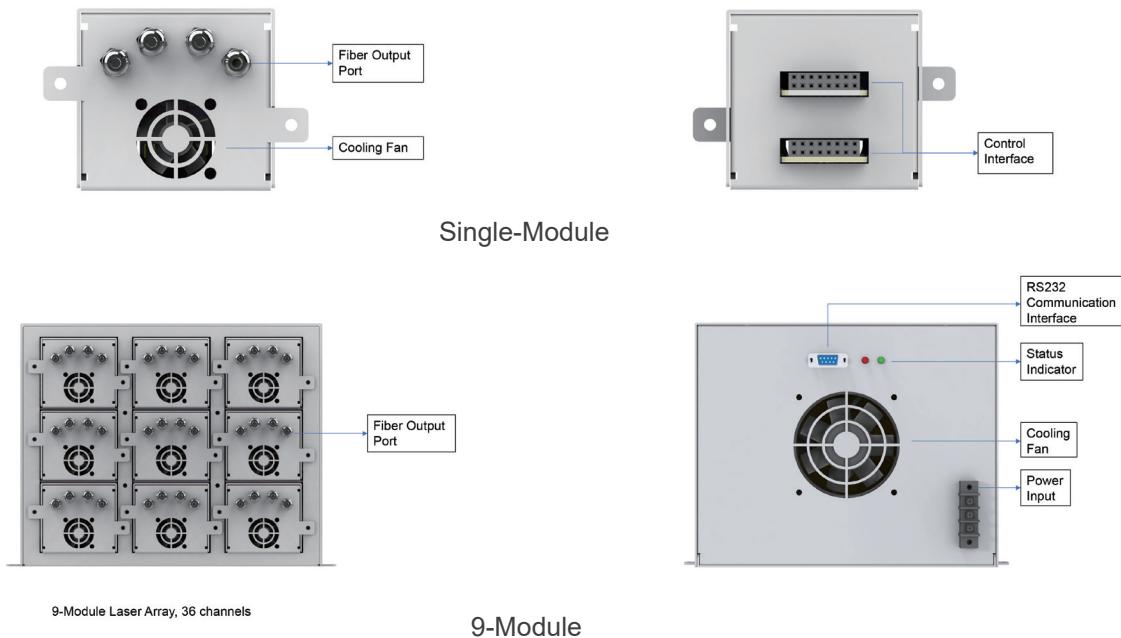
Technical Specifications (25°C)

Center Wavelength (nm)		405	450	520	638	650
Optical	CW Output Power / P_{op} (mW) ⁽¹⁾	50	50	50	60	50
	Wavelength Tolerance (nm)			±10		
	Spectral Width / $\Delta\lambda$ (nm)			<3		
	Temperature Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)			0.3		
	Beam Profile			Single-Mode		
	Module Layout			4*9, 36 output channels in total		
Fiber	Fiber Core Diameter / Cladding Diameter (μm)			4/125, 6/125, 9/125		
	Numerical Aperture / NA			0.14		
	Fiber Length / L (cm)			200±5		
	Connector			SMA 905 metal ferrule (50mm in length, 3.17mm outer diameter)		
Electrical	Working Mode			CW/QCW		
	Repetition Rate (kHz)			0~2		
	Pulse width (ms)			<40		
	Working Time (min)			<45		
	Temperature Control			Built-in TEC, real-time temperature monitoring		
	Control Method			Independent control, Synchronized output allowed		
	Communication			RS232 communication via DB9 port		
	Operating Temperature (°C)			10~35		
	Storage Temperature(°C)			0~60		
	Storage Humidity			0~80% RH		

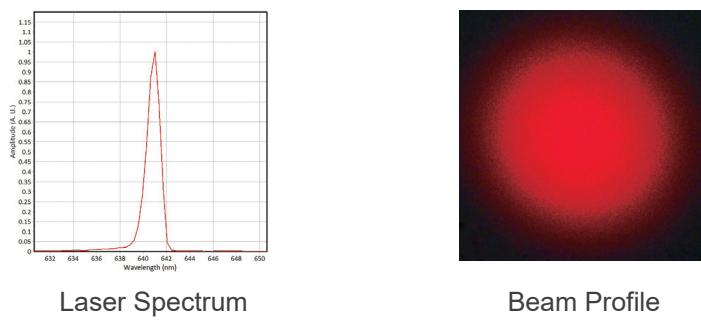
Notes:

- Other output power can be customized.
- Feedback Protection Function is available for this series of products upon request.
- Customizable multi-mode output.
- 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.

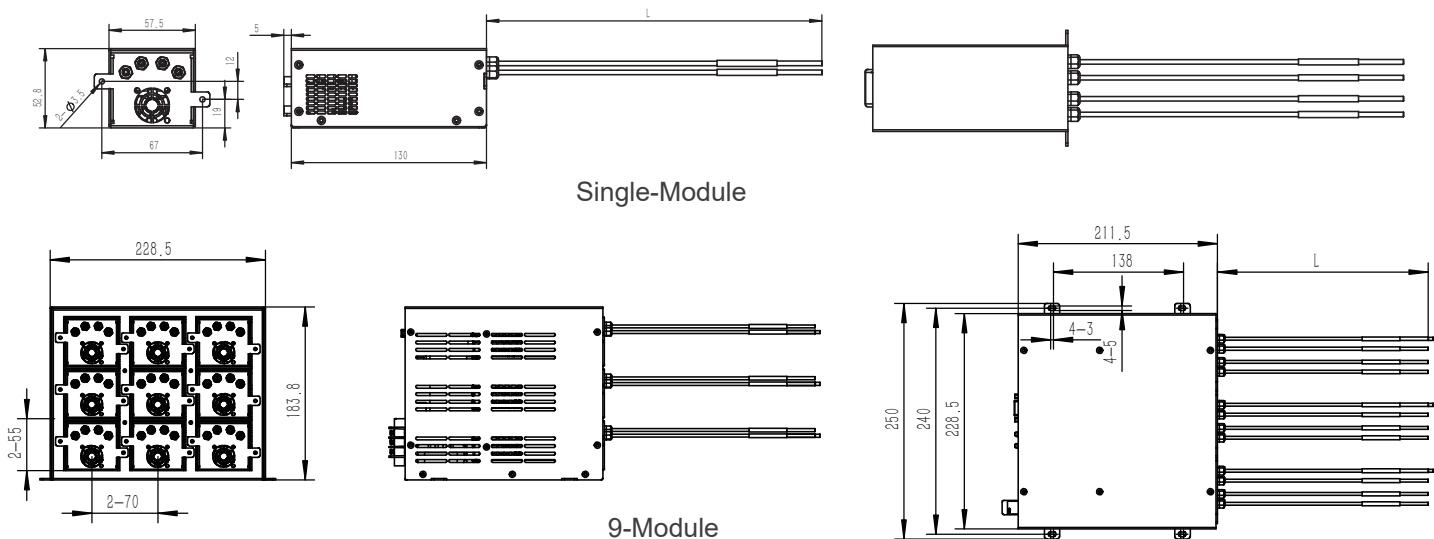
Functional Diagrams



Product Characteristics Diagrams



Mechanical Drawings (in mm)



Note: This dimensional drawing applies to products with wavelengths of 638 nm. For products with other wavelengths, please contact the sales team for validated dimensional specifications.

