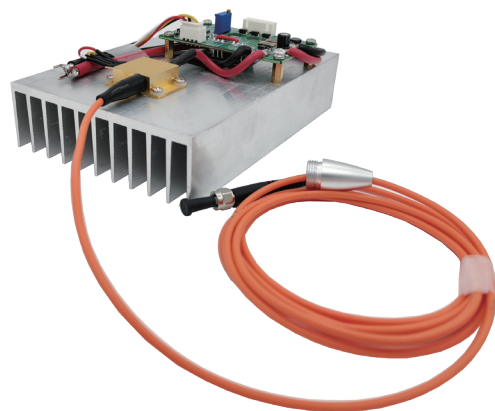


AWMO Diode Laser System



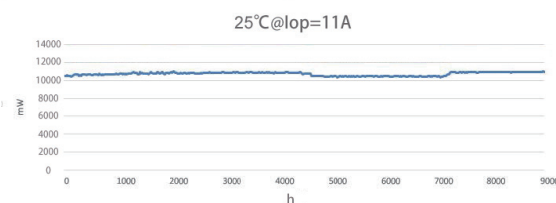
Using high performance and single-wavelength diode laser source, AWMO series of diode laser systems includes up to six wavelengths, 450nm-808nm-915nm-940nm-980nm-1064nm. Apply the wide wavelengths from Blue to NIR according to different target depth, this makes it an ideal laser source targeted in treatment of melanin, water molecules and hemoglobin. The maximum laser output power is up to 20W. AWMO series of products assembles OEM drive circuit, control circuit, and heat dissipation system. Electrical circuits consist of standard input and output interfaces, which decreases the system failure possibility during the combination of optical and electrical components; It is available to choose internal or external TEC for heat dissipation, and the system stability is highly improved. Additionally, customized specifications are available upon request.

Key Features

- ◆ Integrated laser modules, drive circuit, heat dissipation system and more
- ◆ Cost Effective
- ◆ Customization is available upon request, include external TEC, switch power supply and more
- ◆ Super compact design, easy to integrate

Applications

Laser dentistry Face telangiectasis
 Veterinary



AWMO-9xx-IF(S)-10W Long-term reliability test

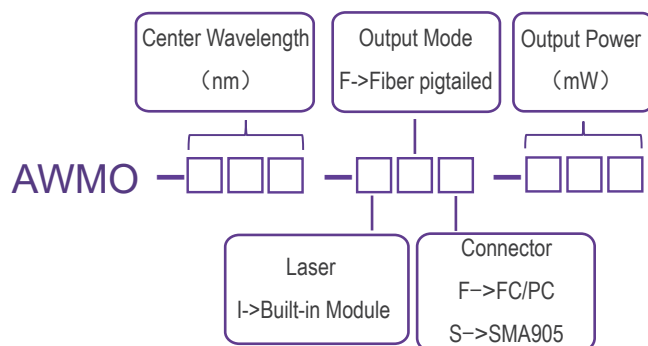
Technical Specifications (25°C)

Center Wavelength (nm)		450	808	9XX	1064	
Optical	CW Output Power / Pop (W)	4	9	10	20	10
	Wavelength Tolerance (nm)	±3, ±10				
	Spectral Width (FWHM) $\Delta\lambda$ (nm)	<4				
	Temperature Drift of Wavelength / $\Delta\lambda/\Delta T$ (nm/°C)	0.3				
Aiming Beam	Output Power / Pa (mW)	2				
	Wavelength / λ_a (nm)	650±10				
	Voltage / Va (V)	2.2, 5.0				
Options	Thermistor, Fiber detector, PD, Internal TEC					
Fiber	Output Mode	Fiber Detachable or Fiber Pigtailed				
	Fiber Core Diameter / Dcore (μm)	105/125, 200/220				
	Fiber Cladding Diameter / Dclad (μm)					
	Fiber Length / L (cm)	100±10 (Customizable)				
	Numerical Aperture / NA	0.22				
Connector	SMA905, FC/PC					
System	System components	Laser Modules, Drive Circuit, Heat Dissipation Modules, Switch Power Supply (Optional)				
	Working Mode	CW/Pulse				
	Modulation Frequency	TTL Modulation, Frequency 0-100Hz				
	Power Modulation	0-5V Analog Signal Power Control 0-100%				
	Optional Function	External TEC				
	Switch Power Supply (Optional)	Drive Circuit: 5V Adjustable @25A External TEC: 12V@8A				
	Heat Dissipation	Air Cooled				
Operation Temperature	10-30°C					

Order Information

Wavelength (nm)	Power (W)	Part Number	Connector
450	4	AWMO-450-IF(S)-4W	SMA905
	4	AWMO-450-IF(F)-4W	FC
808	9	AWMO-808-IF(S)-9W	SMA905
	9	AWMO-808-IF(F)-9W	FC
9xx	10	AWMO-9xx-IF(S)-10W	SMA905
	10	AWMO-9xx-IF(F)-10W	FC
	20	AWMO-9xx-IF(S)-20W	SMA905
	20	AWMO-9xx-IF(F)-20W	FC
1064	10	AWMO-1064-IF(S)-10W	SMA905
	10	AWMO-1064-IF(F)-10W	FC

Part Numbering Schema

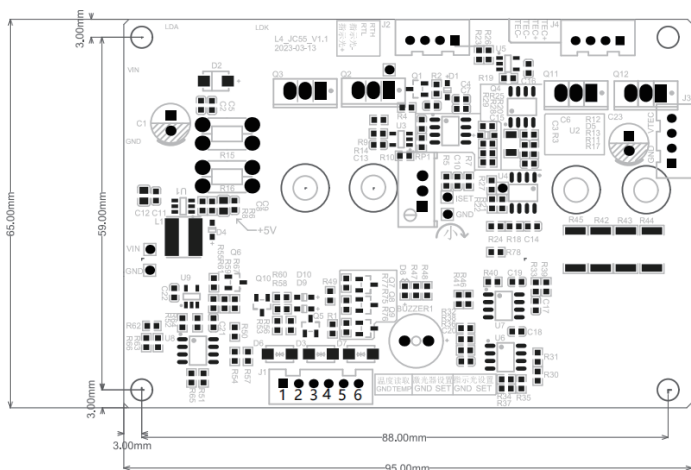
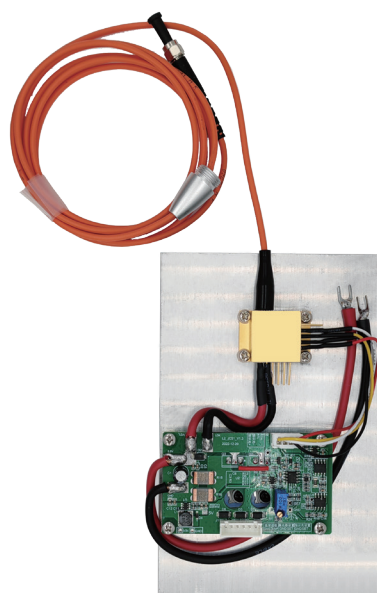


Assembled Circuit Board

1. Function

- a) LD constant current driver
- b) Aiming beam driver
- c) Temperature measurement
- d) TEC driver (temperature control in a single direction)

2. Pin description and mechanical dimensions



Customized circuit board is available upon request.

Pin	Description	Function
1	GND	Analog
2	TEMP	Temperature feedback: 2.5V@25°C
3	GND	Analog
4	LDI_SET	Laser: 0-5V
5	GND	Analog
6	AIM_SET	Red aiming beam: 0-5V

