

AWM Series Diode Laser System

The AWM series diode laser system combines a main control unit, an industrial touchscreen, multi-emitter laser diode modules, drive circuits and a heat dissipation system. It delivers a highly integrated, exceptionally stable, and user-friendly multi-wavelength laser output, making it an ideal solution for spectroscopy, biomedical applications, material processing, display&lighting,

and other industries. The system includes PC control software for real-time monitoring, and supports online firmware updates. Additionally, we offer tailored external fiber-optic light path solutions to meet your specific needs in scientific research, prototype development and more.

Key Features

- Ease of Use Touchscreen control and display
- Safety and reliability Emergency stop and enable switches
- · Built-in control program, supporting online updates
- Up to 4 different wavelength combinations for output
- Simultaneous multi-wavelength output power up to 30W
- Uniform spot and stable power output via single-fiber delivery

Applications

Spectroscopic Detection

Biomedicine

Material Analysis

Display&Lighting

Laser Manufacturing

Technical Specifications (25°C)

	Center Wavelength (nm)		Optional Wavelength																	
			635	650	675	695	755	785	808	830	880	915	940	980	1064	1320	1470	1550	1720	1940
Optical	CW Output Power / Pop (W)	3	3	3	3	3	5	5	10	5	10	10	10	10	10	5	5	3	3	3
	Maximum Average Output Power P _{max} (W)		30																	
	Wavelength Tolerance (nm)										±10									
	Spectral Width / △λ (nm)	<6																		
Aiming	Output Power / Pa (mW)	1~5																		
Beam	Wavelength / λ _a (nm)	650																		
Fiber	Output Mode	Fiber detachable																		
	Fiber Core Diameter / Dcore (µm)	400 (Customizable)																		
	Fiber Length / L (cm)									100±10	(Custor	nizable)								
	Numerical Aperture / NA		0.22																	
	Connector										SMA905	5								
System	Working Mode							С	W/QC	W, Mul	ti-chann	el Synch	ronizati	on						
	Repetition Rate (kHz)		0~10																	
	Pulse width (ms)										0.05~30	0								
	Heat Dissipation	Air Cooling																		
	Display	7-inch capacitive touchscreen																		
	Program Control	Independent setting of power, pulse interval, pulse width, and lasing time																		
	System Power (W)										≤300									
	Power Supply									100~240	VAC, 5	0 / 60 Hz	7							
	Operating Temperature (°C)										10~30									
	Storage Temperature(°C)										0~60									
	Storage Humidity									0	~80% R	Н								
	System Dimensions (W×H×L, mm)									255.2	×166.4×	279.3								

Notes:

- 1. Optional wavelength combinations are provided in the above table. For more information, please contact us.
- 2. 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.

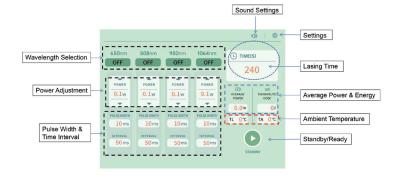




Functional Diagrams

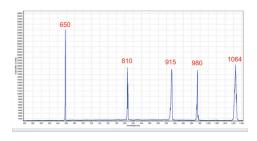






Control Screen

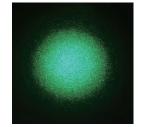
Product Characteristics Diagrams



Multi-wavelength Laser Spectrum



Multi-channel Control Signal Waveforms



Beam Profile

Mechanical Drawings (in mm)

