

AWMO Series Single-Emitter Diode Laser Modules



Key Features

- ◆ Power stability < $\pm 2\%$
- ◆ Low power consumption, typical < 5W
- ◆ Compact design, easily integrated

Applications

Laser-induced fluorescence (LIF)

Fluorescence Spectrometer

Particle size analysis

Flow cytometer

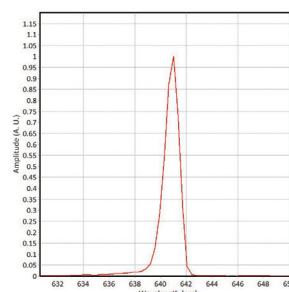
Confocal microscopy

Technical Specifications

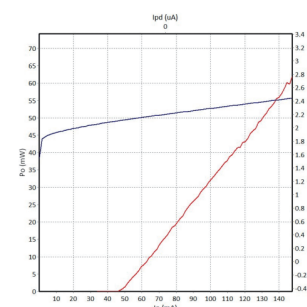
Optical Parameters					
Center Wavelength (nm)	405	450	520	638	650
Output Power (mW)	100	100	100	130	130
Wavelength Tolerance (nm)	±10				
Linewidth (nm)	<3				
Power Stability (typ., @4h)	±2%(P-P)				
Output Fiber (μm/NA)	105/0.22				
Connector	FC/PC, SMA905				
System Parameters					
Adjustbility % Full Power	0~100%				
Warm up Time (min)	15				
Control Interface	PH2.0~10P, USB				
Supply Voltage	5VDC/2A				
Power Consumption	<5W typ.				
Storage Humidity	0~70% RH				
Storage Temperature (°C)	-10~60				
Operating Temperature (°C)	10~35 (heat sink is required)				
Weight (g)	<150				
Dimensions (mm)	76.2×63.5×28				

Notes:

1. Higher power options available upon request.
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.



638nm laser spectrum

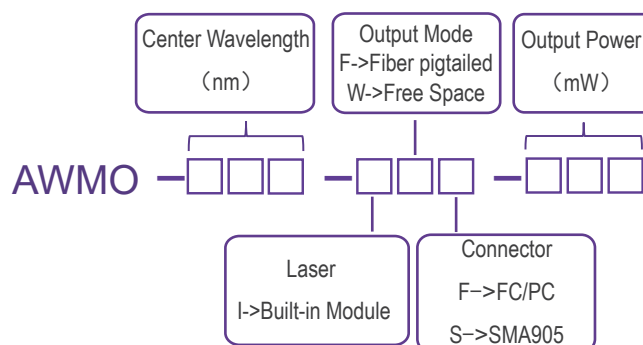


P-I-V Graph

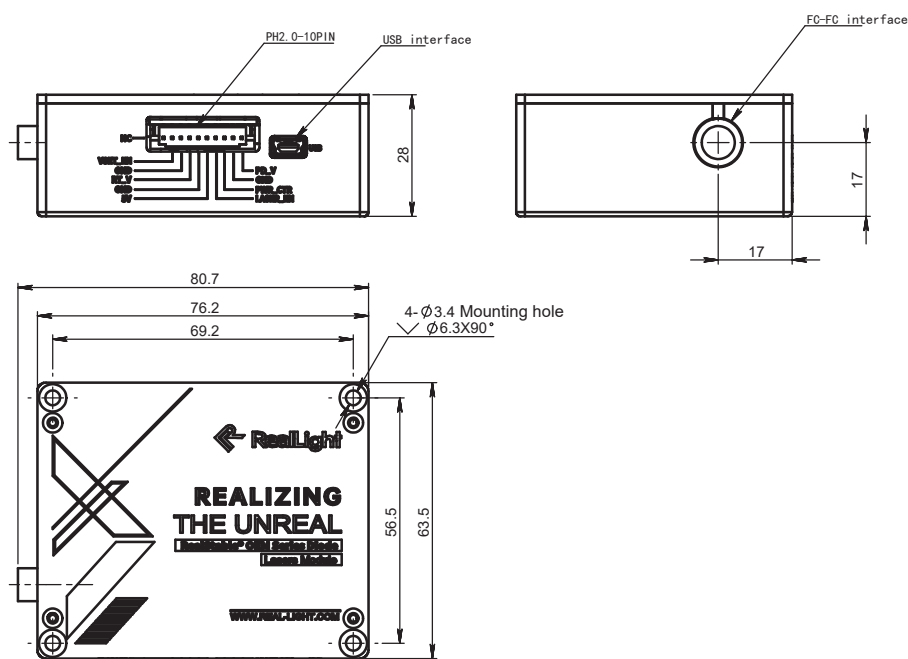
Ordering Information

Wavelength (nm)	Output Power (mW)	Part Number	Connector
405	100	AWMO-405-IF(F)-100	FC/PC
	100	AWMO-405-IF(S)-100	SMA905
450	100	AWMO-450-IF(F)-100	FC/PC
	100	AWMO-450-IF(S)-100	SMA905
520	100	AWMO-520-IF(F)-100	FC/PC
	100	AWMO-520-IF(S)-100	SMA905
638	130	AWMO-638-IF(F)-130	FC/PC
	130	AWMO-638-IF(S)-130	SMA905
650	130	AWMO-650-IF(F)-130	FC/PC
	130	AWMO-650-IF(S)-130	SMA905

Part Numbering Schema



Mechanical Drawings (mm)



Pin Descriptions		
PIN	Function	Description
1	NC	NC
2	VSET_ENABLE	Set to low-level to control power through PIN8, high-level or suspend to disable LD
3	GND	Signal Ground
4	RTV	Rt signal level, 1.5V for 25°C
5	GND	Input Power Ground
6	+5V	5VDC/2A
7	LASER ENABLE	Set to high-level to enable the laser, low-level or suspend to disable LD
8	Power Control	Apply 0-1.2V to control output power (0-100% full power adjustability)
9	GND	Signal Ground
10	PDV	PD feedback signal, 0.5V for 100mW

