

AWSO Series Quasi-wavelength Laser Module



Key Features

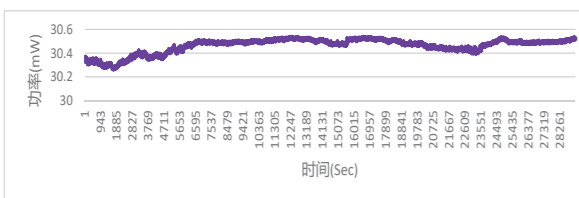
- ◆ Power stability $\pm 2\%$ @ 4h
- ◆ Built-in TEC, typical power consumption <math>< 5W</math>
- ◆ Compact design, easy integration
- ◆ USB interface and hardware lock available
- ◆ PM fiber or MM fiber available upon request

Applications

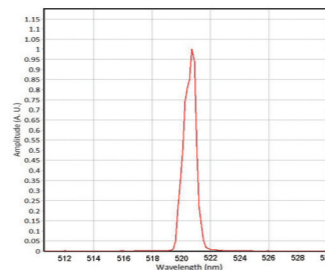
- Laser-induced fluorescence (LIF)
- Particle size analysis
- Flow cytometer
- Confocal microscopy
- Laser holography
- Laser indicator

Technical Specifications

Optical Parameters					
Center Wavelength (nm)	405	450	520	638	650
Wavelength Tolerance (nm)	± 5	± 10	± 10	± 10	± 10
Output Power (mW)	100	100	100	100	100
Linewidth (nm)	<math>< 2</math>	<math>< 2</math>	<math>< 3</math>	<math>< 3</math>	<math>< 3</math>
Output Fiber ($\mu\text{m}/\text{NA}$)	105/0.22				
Connector	FC/PC, FC/APC				
Power Stability	$\pm 2\%$ @ 4h Typ.				
System Parameters					
Adjustability % Full Power	0~100%				
Warm up Time (min)	10				
Control Interface	USB, PH2.0-10P				
Supply Voltage	+5VDC				
Power Consumption (W)	<math>< 5</math>				
Storage Humidity	0~80% RH				
Storage Temperature ($^{\circ}\text{C}$)	-10~60				
Operating Temperature ($^{\circ}\text{C}$)	10~35				
Weight (g)	<math>< 150</math>				
Dimensions (mm)	76.2 \times 63.5 \times 22				



520nm power stability @8h

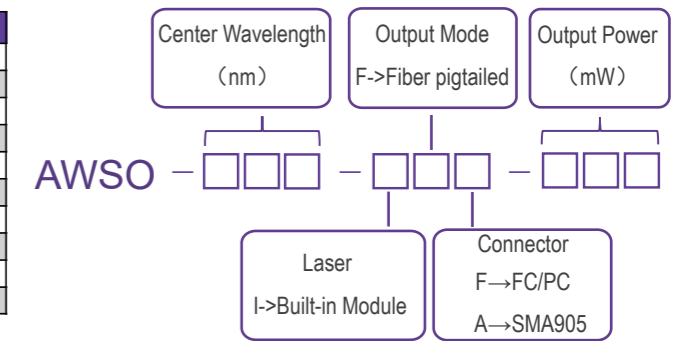


520nm spectrum

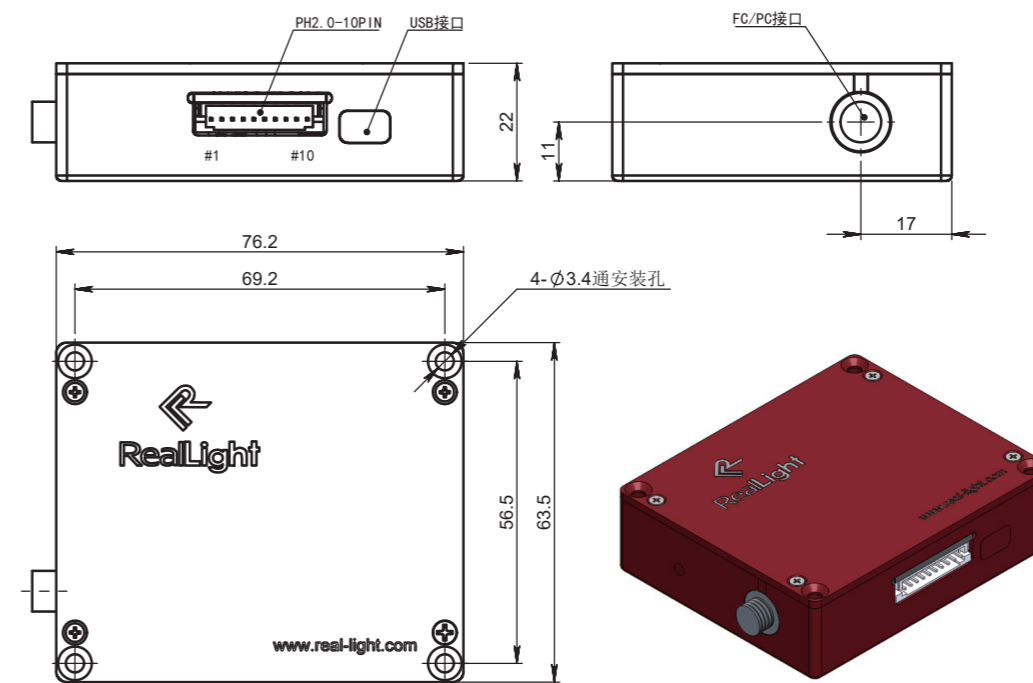
Ordering Information

Wavelength (nm)	Output Power (mW)	Part Number	Connector
405	100	AWSO-405-IF(F)-100	FC/PC
	100	AWSO-405-IF(A)-100	SMA905
450	100	AWSO-450-IF(F)-100	FC/PC
	100	AWSO-450-IF(A)-100	SMA905
520	100	AWSO-520-IF(F)-100	FC/PC
	100	AWSO-520-IF(A)-100	SMA905
638	100	AWSO-638-IF(F)-100	FC/PC
	100	AWSO-638-IF(A)-100	SMA905
650	100	AWSO-650-IF(F)-100	FC/PC
	100	AWSO-650-IF(A)-100	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	Input Power Ground
4	RTV	Rt signal level, 1.5V for 25 $^{\circ}\text{C}$
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