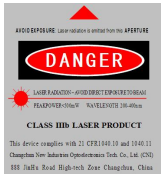
AO-S series (1001-1500nm)

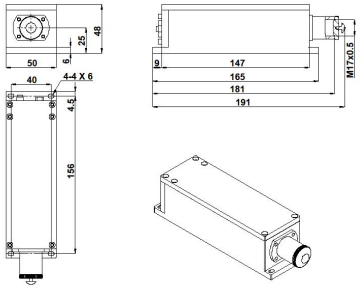
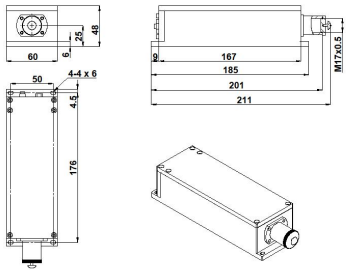
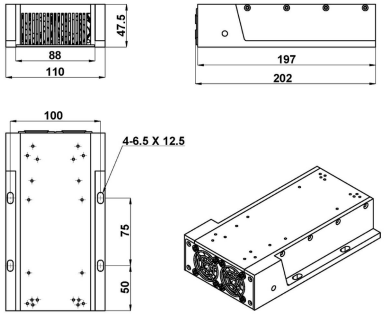
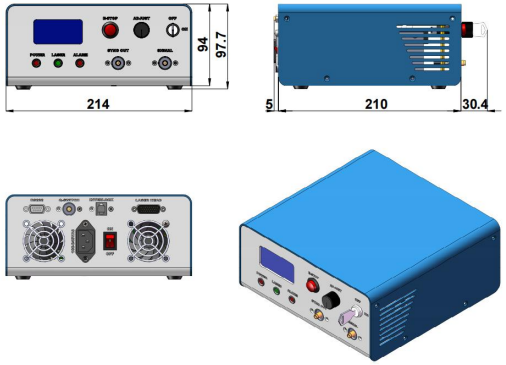
LD PUMPED ALL-SOLID-STATE ACTIVELY LASER



All solid state actively laser has the features of high peak power, high repetition rate, and short pulse duration, which is widely used in material processing, measure, scientific research and so on.

SPECIFICATIONS

Wavelength (nm)	1047±1	1053±1	1064±1	1342±1
Operating mode	Actively			
Average power (mW)[1]	1-1300	1-1000	1-2500	1-1900
Single pulse energy (μJ)[2]	1-250 (250μJ @1kHz; 100μJ @10kHz)		1-350 (350μJ @1kHz; 180μJ @10kHz)	1-150 (150uJ@1kHz; 100uJ@10kHz)
Pulse duration (ns)[3]	5-11ns @<10kHz			~27ns@1kHz; ~35ns@10kHz
Peak power (kW)	0.2-36		0.2-50	0.1-5.5
Rep. rate[4]	1Hz-80kHz		1Hz-100kHz	
Power stability (rms, 4 hours ±3°C)	<5%, <3%, <2%		<3%, <2%, (<1% optional)	<5%, <3%, <2%
Transverse mode	TEM_{00}			
M^2	<1.5			
Beam diameter at the aperture $1/e^2$ (mm)	~1.2			
Beam divergence, full angle (mrad)	<1.5			
Polarization ratio	>100:1, Horizontal (Vertical optional)			
Warm-up time (minutes)	<10			
Beam height from base plate (mm)	25			
Operating temperature (°C)	10-35			
Power supply (100-240VAC)	PSU-AOM-DL			
Expected lifetime (hours)	>10000			

LASER HEAD (AO-S-1047/1053/1064)[5]	LASER HEAD (AO-S-1342)[5]
	
191(L) × 50(W) × 48 (H) mm³, 0.78kg	**211(L) × 60(W) × 48 (H) mm³, 1.05kg**
HEATSINK (optional TC-02-FS)	**POWER SUPPLY[6]**
	
202(L)×110(W)×47.5(H) mm³, 1.25kg	**245.4 (L) ×214(W) ×97.7(H) mm³, 3.2kg**

1 Average power (mW)= Single pulse energy (μJ)* Rep. rate(kHz)

2 Any energy level can be selected within this range.

3 Pulse width not tunable, the value varies with different frequency and energy.

4 Frequency is adjustable within this range.

5 The laser head needs to be used on a heat sink with good heat dissipation.

6 Output energy adjustable 10-100%; RS232 control optional.