



AO-S series

LD PUMPED ALL-SOLID-STATE ACOUSTO-OPTIC Q-SWITCHED LASER

All solid state acousto-optic Q-switched 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)	266±1	349±1	351±1	355±1
Operating mode	Acousto-Optics Q-switched			
Max average power (mW)*	1~10	1~15	1~30	1~100
Single pulse energy (μJ)	1~5 (5μJ @1kHz; 1μJ @5kHz)	1~8 (8μJ @1kHz; 1μJ @5kHz)	1~15 (15μJ @1kHz; 3μJ @5kHz)	1~40 (40μJ @1kHz; 10μJ @5kHz)
Pulse duration(varies from power and repetition.)	Typically ~4ns	Typically 6~10ns@<10kHz		Typically 5~10ns @<10kHz
Peak power(kW)	0.25~1.25	0.16~1.3	0.16~2.5	0.2~8
Rep. rate (kHz)	0.001~5	0.001~10	0.001~15	0.001~20
Power Stability (rms,over 4 hours)	<10%, <5%, <3%			
Transverse mode	Near TEM <sub>00</sub>			
M <sup>2</sup> factor	<2			
Beam Diameter at the aperture 1/e <sup>2</sup> (mm)	Elliptical(4:1), Beam spot ~1.5×0.4mm	~1.0		
Beam divergence, full angle (mrad)	<2			
Polarization ratio	>100:1			
Warm-up Time (minutes)	<10			
Beam height from base plate (mm)	30	25		
Operating temperature(°C)	10~35			
Power supply (90-264VAC)	PSU-AOM-DL			
Expected lifetime (hours)	5000	10000		
Warranty	1 year			

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

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



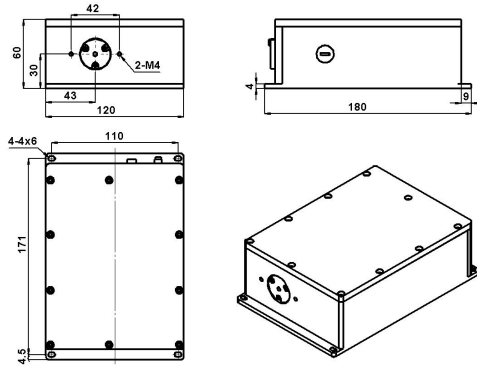
**SPECIFICATIONS**

Wavelength (nm)	523.5±1	526.5±1	532±1	1047±1	1053±1	1064±1
Operating mode	Acousto-Optics Q-switched					
Max average power (mW)*	1~100	1~50	1~250	1~1300	1~1000	1~2500
Single pulse energy (μJ)	1~50 (50μJ @1kHz; 20μJ @5kHz)	1~20 (20μJ @1kHz; 10μJ @5kHz)	1~100 (100μJ @1kHz; 50μJ @5kHz)	1~250 (250μJ @1kHz; 100μJ @10kHz)		1~350 (350μJ @1kHz; 180μJ @10kHz)
Pulse duration(varies from power and repetition)	Typically 5~10ns@<10kHz			Typically 7~11ns @<10kHz		
Peak power(kW)	0.2~10	0.2~4	0.2~20	0.14~36		0.14~50
Rep. rate (kHz)	0.001~50			0.001~80		0.001~100
Power Stability (rms,over 4 hours)	<5%, <3%, <2%					
Transverse mode	TEM <sub>00</sub>					
M <sup>2</sup> factor	<1.5					
Beam Diameter at the aperture 1/e <sup>2</sup> (mm)	~1.2					
Beam divergence, full angle (mrad)	<1.5					
Polarization ratio	>100:1					
Warm-up Time (minutes)	<10					
Beam height from base plate (mm)	25					
Operating temperature(°C)	10~35					
Power supply (90-264VAC)	PSU-AOM-DL					
Expected lifetime (hours)	10000					
Warranty	1 year					

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

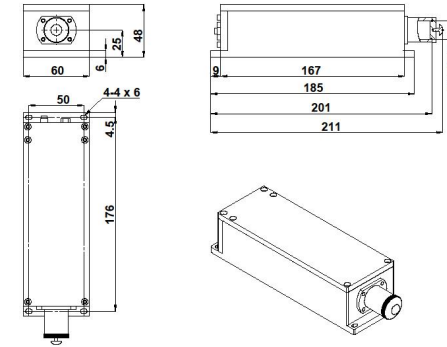
**Note: The laser head needs to be used on a heat sink with good heat dissipation.**

LASER HEAD (AO-S-266)



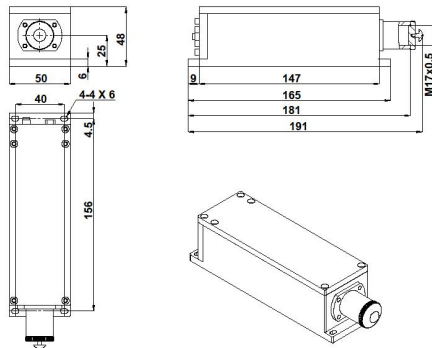
180(L) × 120(W) × 60 (H) mm<sup>3</sup>, 2.14kg

LASER HEAD (AO-S-349/ 351/ 355/ 523.5/ 526.5/ 532)



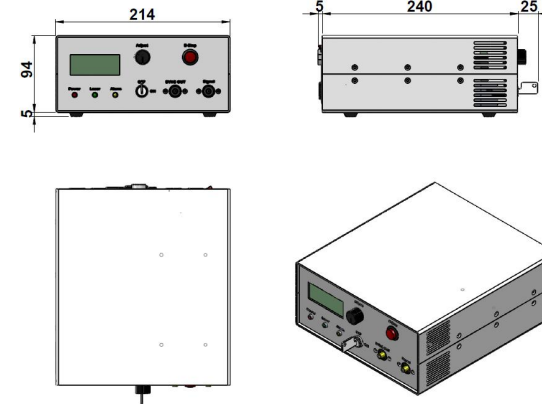
211(L) × 60(W) × 48 (H) mm<sup>3</sup>, 1.05kg

LASER HEAD (AO-S-1047/ 1053/ 1064)



191(L) × 50(W) × 48 (H) mm<sup>3</sup>, 0.78kg

POWER SUPPLY



270 (L) × 214(W) × 99(H) mm<sup>3</sup>, 3.2 kg