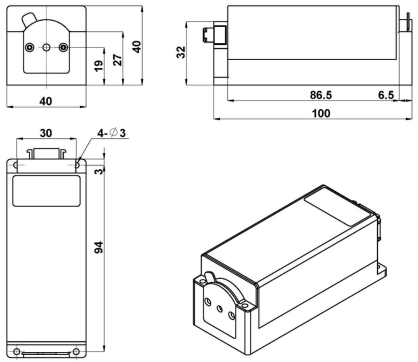
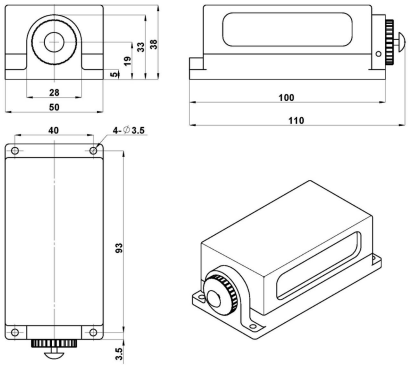
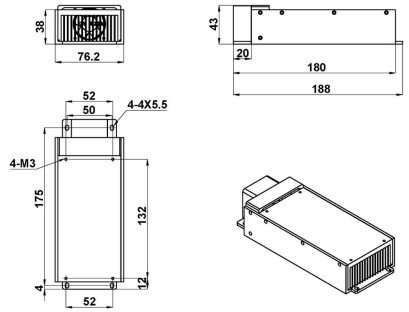
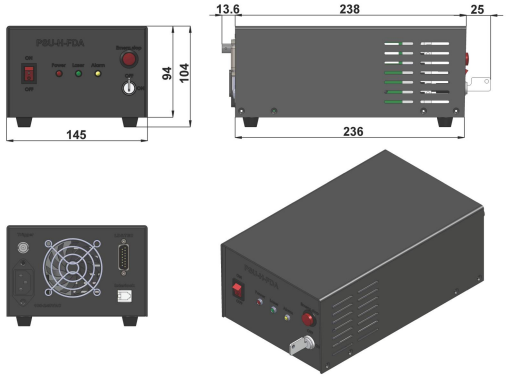
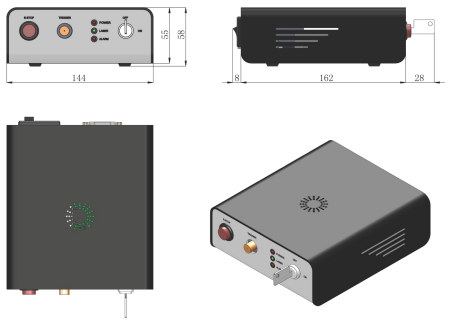
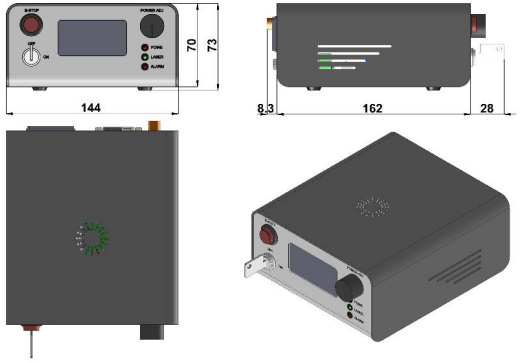
MGL-S series (581-600nm)

LD PUMPED ALL-SOLID-STATE LASER

The all-solid-state laser features high output power stability, a good beam profile, a compact size, a wide operating temperature range, excellent sealing, a long lifetime, cost-effectiveness, and ease of operation. It is capable of operating at pressures as low as 0.02 kPa and is widely used in various applications, including collimation, laser medical treatment, scientific experiments, optical instrumentation, laser displays, and laser lighting shows.

SPECIFICATIONS

Model	MGL-S-588	MGL-S-588-A (Harsh condition)	MGL-S-589	MGL-S-589-A (Harsh condition)
Wavelength (nm)	588±2		589±1	
Operating mode	CW			
Output power (mW)[1]	1-50			
Power stability (rms, 4 hours ±3°C)	<3%, <2%, <1%, (<0.5% optional)			
Transverse mode	TEM_{00}			
M^2	<1.2			
Beam diameter at the aperture ($1/e^2$, mm)	<1.0			
Beam divergence (mrad)	<1.5			
Polarization ratio	>100:1, Horizontal (Vertical optional)			
Warm-up time (minutes)	<5			
Pointing stability (μrad) (over 2 hours after warm-up and ±3°C)	<50			
Pointing stability over temperature (μrad/°C)	<8			
Beam height from base plate (mm)	19			
Power consumption (W)	<30			
Shock tolerance (6ms)	7g laterally, 15g vertically			
Max. heat dissipation of head (W)	4W@25℃	10W@50℃	4W@25℃	10W@50℃
IP rating	IP65	IP67	IP65	IP67
Operating temperature (℃)	10-35	0-60	10-35	0-60
Modulation optional	DC-1kHz, 1kHz-10kHz, 10kHz-30kHz optional; TTL and Analog optional			
Power supply (100-240VAC)	PSU-A-D/PSU-A-F	PSU-H-FDA	PSU-A-D/ PSU-A-F	PSU-H-FDA
Expected lifetime (hours)	>10000			

LASER HEAD[2]	LASER HEAD (Harsh condition)[2]	HEATSINK (optional TC-04-FS)
		
100 (L) ×40 (W) ×40(H) mm³, 0.36kg	**110(L)×50(W) ×38(H) mm³, 0.6kg**	**188(L)×76.2(W)×43(H) mm³, 0.65kg**
POWER SUPPLY (PSU-H-FDA)[3]	POWER SUPPLY (PSU-A-F)[3]	POWER SUPPLY (PSU-A-D)[4]
		
276.6(L) ×145(W) ×103.6(H) mm³, 2.3kg	**198(L) × 144(W) × 58(H) mm³, 0.5kg**	**198.3 (L) × 144(W) ×73(H) mm³, 0.6kg**

1 Any power level can be selected in this range.

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

3 Fixed output power.

4 Output power adjustable 10-100%; RS232 control optional.