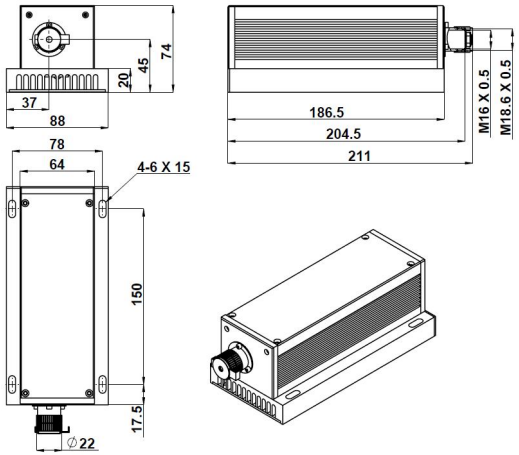
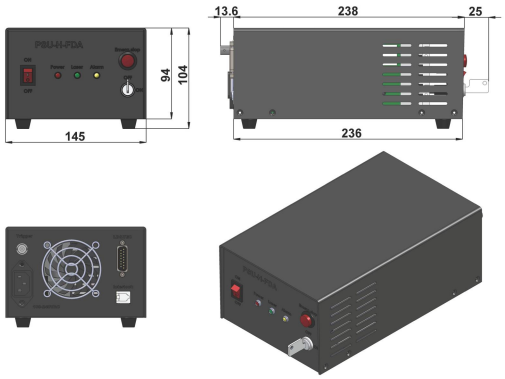
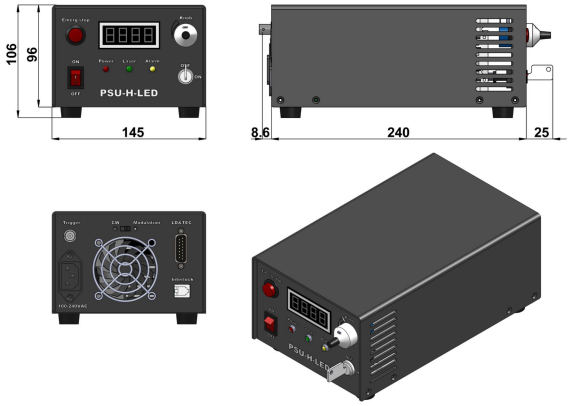
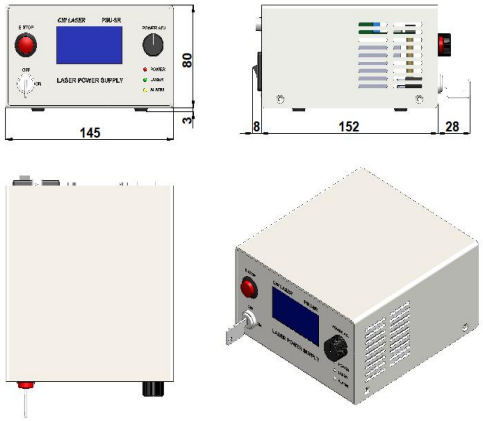
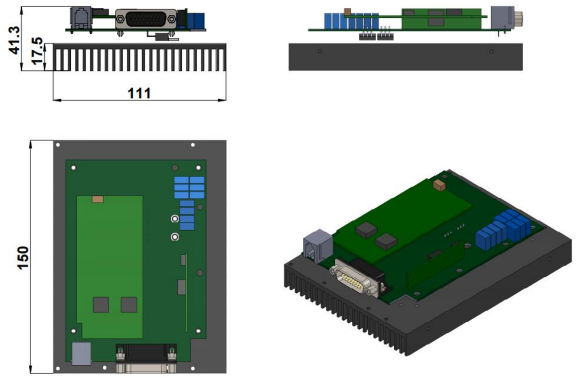
MBL-F series

LD PUMPED ALL-SOLID-STATE LASER

The all-solid-state laser is characterized by its compact size, long lifetime, low cost, and ease of operation. It is widely used in various fields, including fluorescence sensing, Raman spectroscopy, laser printing, holography, laser display, submarine communications, biomedicine, and laser light shows.

SPECIFICATIONS

Wavelength (nm)	457±1	473±1	480±1
Operating mode	CW		
Output power (mW)[1]	500-1000	300-500	1-50
Power stability (rms, 4 hours ±3°C)	<5%, <3%	<2%, <1%, <0.5%	<5%, <3%
Transverse mode	Near TEM_{00}	TEM_{00}	
M^2	<2.0	<1.5	<2.0
Beam diameter at the aperture ($1/e^2$, mm)	~2.0		~3.0
Beam divergence (mrad)	<1.5		
Polarization ratio	>100:1, Vertical (Horizontal optional)		>100:1, Horizontal (Vertical optional)
Warm-up time (minutes)	<5		
Pointing stability (μrad) (over 2 hours after warm-up and ±3°C)	<50		
Beam height from base plate (mm)	45		
Operating temperature (°C)	10-35		
Modulation optional	DC-1kHz, 1kHz-10kHz, 10kHz-30kHz optional; TTL and Analog optional		
Power supply (100-240VAC)	PSU-H-FDA/PSU-H-LED/PSU-SR		PSU-H-FDA
Power supply (12VDC)	PSU-SR-OEM (12V/25A)		/
Expected lifetime (hours)	>10000		

LASER HEAD	POWER SUPPLY (PSU-H-FDA)[2]	POWER SUPPLY (PSU-H-LED)[3]
		
211 (L)×88(W) ×74(H) mm³, 1.6kg	276.6(L) ×145(W) ×103.6(H) mm³, 2.3kg	273.6 (L) ×145(W) ×106 (H) mm³, 2.3kg
POWER SUPPLY (PSU-SR)[3]	**DRIVER (PSU-SR-OEM)[3]**	
		
188(L) ×145(W) ×83(H) mm³, 1.2kg	150(L) ×111(W) ×41.3(H) mm³, 0.8kg	

1 Any power level can be selected in this range.

2 Fixed output power.

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