

MDL-NS-405/1-300mW



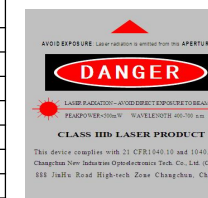
**NANOSECOND PULSED  
VIOLET DIODE LASER  
AT 405nm**

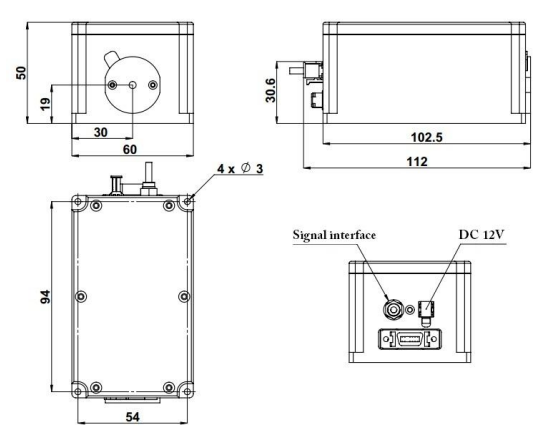
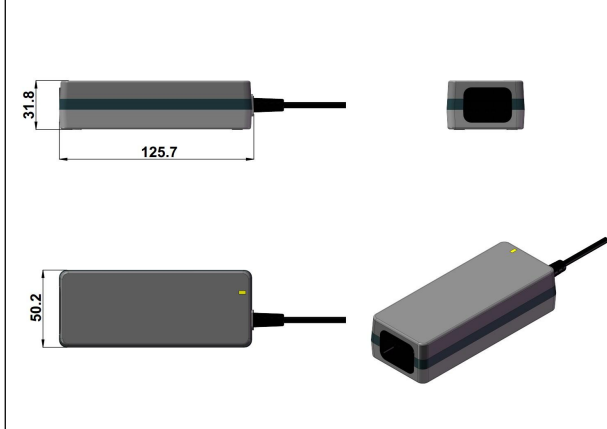
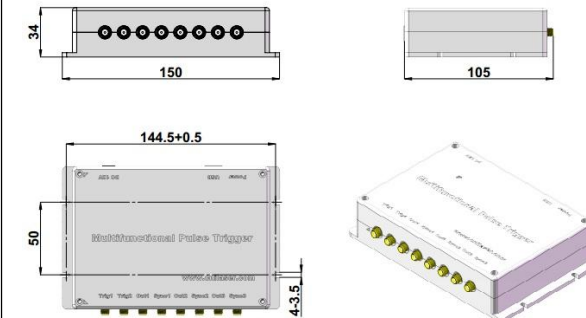
This series laser products with excellent material removal rate, are widely used in microelectronics, material processing, solar energy and medical equipment manufacturing, etc.



SPECIFICATIONS

Central wavelength (nm)	405±5	
Operating mode	Pulsed	
Peak power (mW) <sup>1</sup>	1-200	200-300
Power stability (rms, 4 hours ± 3°C)	<2%, <1%, <0.5%	
Pulse width (FWHM)	10ns-10ms	12ns-10ms
Transverse mode	Near TEM <sub>00</sub>	
M <sup>2</sup>	<1.2	
Beam diameter at the aperture (1/e <sup>2</sup> , mm)	~1.2	
Beam divergence, full angle (mrad)	<1.0	
Polarization ratio	>50:1, (>100:1 optional) Horizontal±5 degree (Vertical optional)	
Rep. rate <sup>2</sup>	DC-80MHz	DC-45MHz
Rise Time (ns)	<3	<7
Fall Time (ns)	<3	<3
Modulation Depth (extinction ratio)	>1000000:1	
Warm-up time (minutes)	<5	
Cooled method	Conduction	
Beam height from base plate (mm)	19	
Operating temperature (°C)	10-35	
Operating voltage (VDC)	12V/3.34A	
Expected lifetime (hours)	>10000	



LASER HEAD (DRIVER Integrated) <sup>3</sup>	POWER SUPPLY (100-240VAC) optional	MULTIFUNCTIONAL PULSE TRIGGER optional
 <p>112 (L) × 60 (W) × 50 (H) mm<sup>3</sup>, 0.5kg</p>	 <p>125.7 (L) × 50.2 (W) × 31.8 (H) mm<sup>3</sup>, 0.3kg</p>	 <p>150 (L) × 105 (W) × 34 (H) mm<sup>3</sup>, 0.5kg</p>

1 Any power level can be selected in this range.

2 Both internal and external triggers are acceptable. The internal trigger supports a frequency range of DC-25MHz.

3 RS232 control optional, output power adjustable 10-100% by software.