AOPico Montauk Series

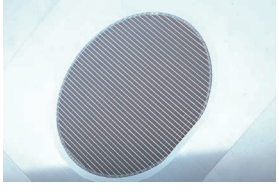
Industrial deep UV picosecond laser

- < Industry-leading fourth harmonic generation
- < Reliable power stability (＜3%)
- < Industrial grade DUV picosecond laser
- < Excellent beam quality
- < Long term stability and reliability

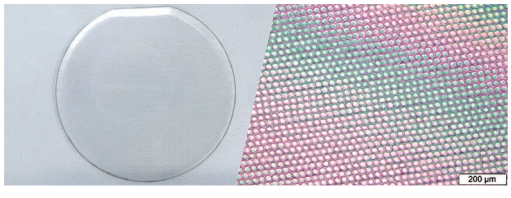
Features & Benefits：

This is a water-cooled deep UV nanosecond laser with output wavelength of 266 nm. With the industrial-leading harmonic generation technology and engineering design, it has high conversion efficiency, excellent long-term stability and long lifetime. The water-cooled design allows the laser to work reliably in various harsh and extreme environments and makes the laser to be the ideal candidate for the 7x24 non-stop production needs.

The output power ranges from 0.5W to 3W. Both MHz frequency and kHz frequency versions are available. With the wide range of repetition rate, excellent beam quality (M2<1.2) and beam roundness (> 90%), it is the perfect candidate for various application areas, including peeling-off GaN from Sapphire, non-carbonized cold processing, glass grain lifting-off, chip inspection and so on.



Wafer marking



Sapphire GaN lift off

mini/micro led lift off

AOPico Montauk 266				
Specification	**0.5W-120M**	**1.5W-120M**	**3W - 70M**	**5W-70M**
Wavelength (nm)	266.08±0.1			
Line Width (pm; FWHM)	≤ 20			
Output power (W)	≥ 0.5	≥1.5	≥3	≥5
Repetition Rate (kHz)	≥120	≥120	≥70	≥70
Power adjustment range (%)	90%-100%		1%-100%	
Output power stability (pv)	≤ 0.5 % @8h			
RMS Noise	<1% rms (<3MHz)			
Beam Quality (M^2)	≤1.2			
Output girdle diameter and position	1.8mm±10% ， distance from the output aperture to the beam waist+/-2m			
Ellipticity	≥90%			
Polarization Ratio	100:1 Linear,Horizontal			
Inter-pulse intensity difference (PV)	≤ 5%			
Difference in directionality after point change (urad)	≤ 100			
Temperature pointing stability (urad/K)	≤ 20			
Input Voltage (VDC)	DC24V			
Overall power/power consumption (W)	< 250	< 450	< 450	< 800
Operational Temperature Range (°C)	20-25°C			
Cooling	Water			
Water cooler cooling capacity requirements	300W	500W	500W	1000W
Power monitoring	internal PD			
Lifetime (h)	≥ 10000, single point≥ 500			
Manual/automatic point change	automatic			

AOPico Montauk 266		
Specification	**1W - 10K**	**3W - 100K**
Wavelength (nm)	266	266
Average Power (Watts)	> 1	> 3W
Energy (μJ)	> 130	> 30
Specified Repetition Rate(kHz)	10KHz	100MHz
Repetition Rate (kHz)	Single Shot-30KHz	Single Shot-300kHz
Pulse Width (ps)	< 30	< 30
Beam Quality (M^2)	<1.3	
Beam Roundness (%)	>85	
Beam Diameter (mm)	~1.8±10%	
Beam Divergence (mRad)	0.3±10%	
Point Stability (μrad/°C)	< 20	
Polarization Ratio	100:1 Linear,Horizontal	
Pulse-to-Pulse Stability (% RMS)	< 3	
Average Power Stability(% over12 hours)	< 3	
Cold Start Warm-Up (mins.)	< 60	
Standby Warm-Up (mins.)	< 10	
Operational Temperature Range (°C)	15-35°C	
Operation Humidity Range (%)	20 to 80, Non-condensing	
Storage Temperature Range (°C)	- 20 to 50	
Storage Humidity Range (%)	20 to 80, Non-condensing	
Input Voltage (VDC)/Rated Power(W)	24 / 600	
Communication	RS232	
Cooling	Water	
Weight (kg)	55	

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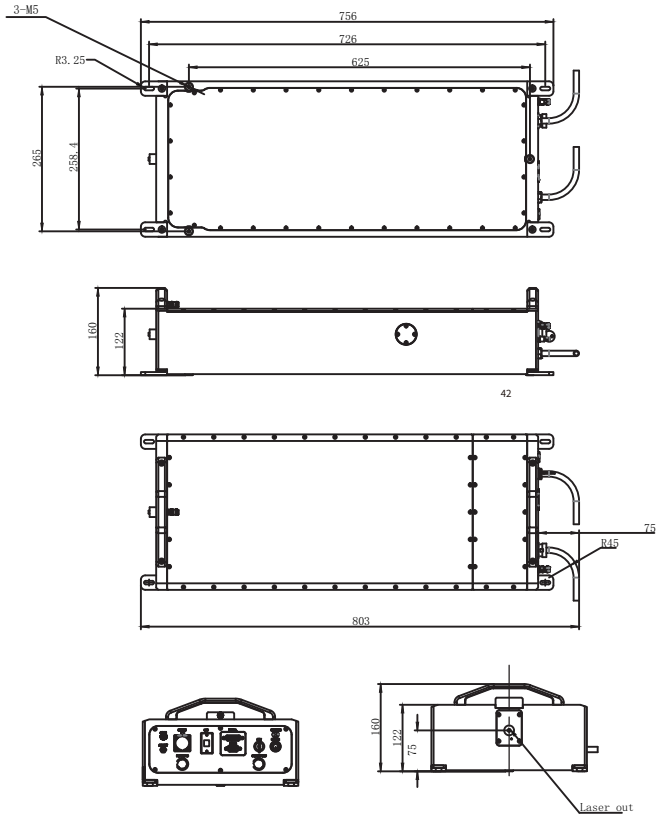
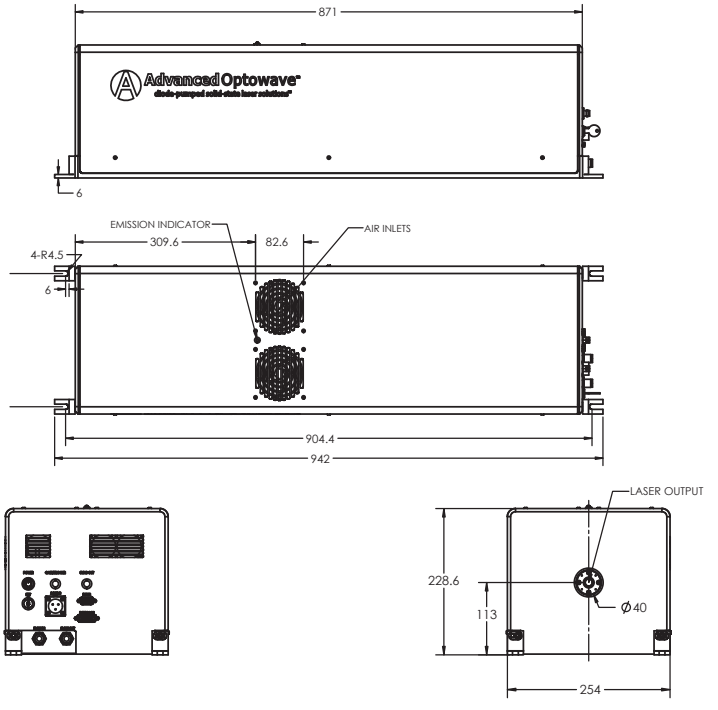
AOPico Montauk Laser CAD Drawing



AOPico Montauk-266-High Frequency



AOPico Montauk-266-Low Frequency