

AOPico Montauk Series

Industrial deep UV picosecond laser

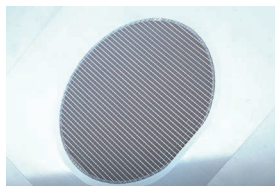
- < Industry-leading fourth harmonic generation
- < Reliable power stability ($< 3\%$)
- < Industrial grade DUV picosecond laser
- < Excellent beam quality
- < Long term stability and reliability



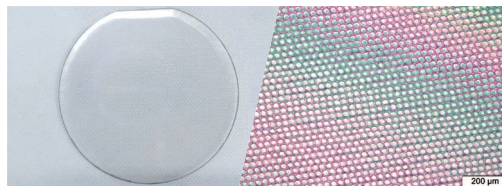
► Features & Benefits:

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 ($M^2 < 1.2$) 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



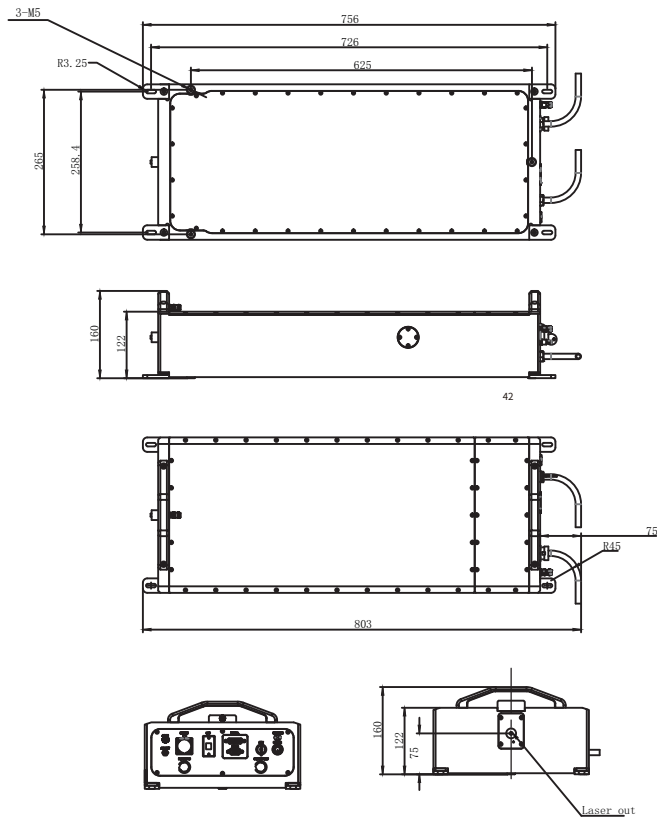
mini/micro led lift off

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			

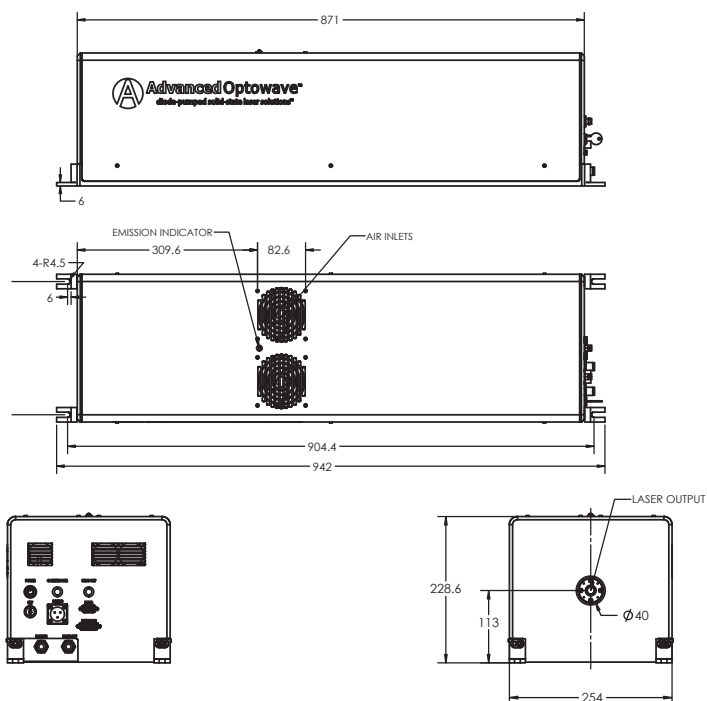
AOPico Montauk 266		
Specification	1W - 10K	3W - 100K
Wavelength (nm)	266	266
Average Power (Watts)	> 1	> 3W
Energy (μJ)	> 130	> 30
Specified Repetition Rate(kHz)	10KHz	100MHz
Repetition Rate (kHz)	Single Shot-30KHz	Single Shot-300kHz
Pulse Width (ps)	< 30	< 30
Beam Quality (M ²)	<1.3	
Beam Roundness (%)	>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	

AOPico Montauk SERIES

AOPico Montauk Laser CAD Drawing



AOPico Montauk-266-High Frequency



AOPico Montauk-266-Low Frequency