

AONano Compact Pro Series Water-cooled

Industrial UV nanosecond laser

- < Power monitoring available
- < Automatic end mirror adjustment
- < Crystal indexing
- < Automatic power optimization
- < IP65 protection rating



► Features & Benefits:

This is the upgraded version of our water-cooled AONano Compact-355 laser series. With the intelligent features listed below, the long-term stability of the laser is significantly improved, and the service time/cost is greatly reduced.

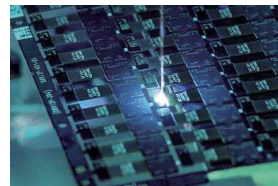
The all-in-one design with a compact size and low weight saves the installation space, reduces the integration cost and simplifies the installation and disassemble processes for customers. It also eliminates the risk of failure caused by the wire connection and the difficulties dealing with the umbilical with a separate laser head and controller. 3W, 5W and 10W versions are available. The operating frequency ranges from 10kHz to 300kHz. The pulse energy is 200μJ+. With a short pulse width (<15ns@50k), high pulse energy, excellent beam quality ($M^2 < 1.2$) and perfect beam roundness (>90%), it is the perfect candidate for various application areas, including consumer electronics material surface marking/engraving, marking-on-the-fly in a packaging line, glass engraving, 3D printing and so on.



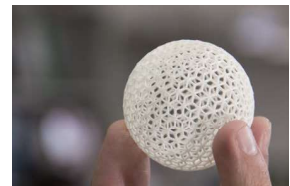
Package marking



3C marking



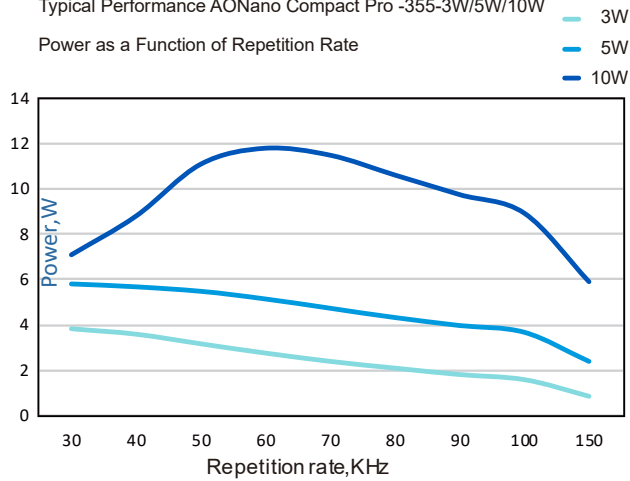
FPC/PCB marking



3D printing

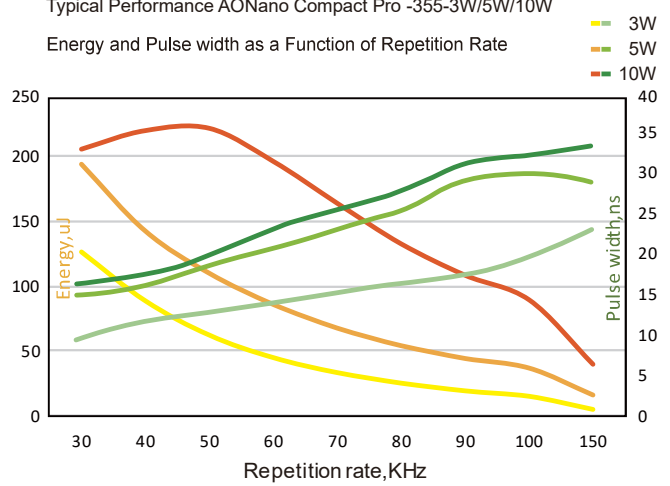
Typical Performance AONano Compact Pro -355-3W/5W/10W

Power as a Function of Repetition Rate



Typical Performance AONano Compact Pro -355-3W/5W/10W

Energy and Pulse width as a Function of Repetition Rate



AONano Compact Pro 355			
Specification	3W-30K	5W-30K	10W-50K
Wavelength (nm)	355		
Average Power (Watts)	>3W@30KHz	>5W@30KHz	>10W@50KHz
Energy (μJ)	>100	>160	>200
Specified Repetition Rate(kHz)	30		50
Repetition Rate (kHz)	10 ~ 300		
Pulse Width (ns)	<15		<13
Beam Quality (M²)	< 1.2		
Beam Roundness (%)	> 90		
Beam Diameter (mm)	~0.45		0.65
Beam Divergence (mRad)	< 1.5		
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.)	< 40		
Standby Warm-Up (mins.)	< 10		
Operational Temperature Range (°C)	5-40°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)	24/450		
Power Consumption(W)	< 110	< 130	< 180
Communication	RS232		
Cooling	Water		
Weight (kg)	7		

AONano Compact Pro SERIES (water cooling)

AONano Compact Pro -355 (water cooling) Laser CAD Drawing

