AONano Precision(S) Series

Industrial UV nanosecond laser

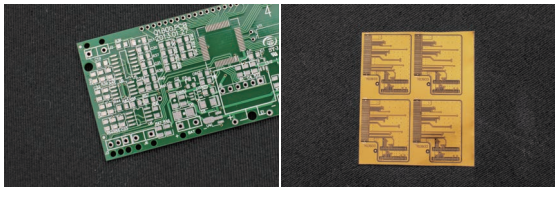
- < Lightweight design, easier for integration
- < Maximum output power: > 20W
- < Excellent optical performance
- < Power monitoring
- < Automatic power optimization

Features & Benefits:

The AONano Precision(S) laser series feature a compact size, good compatibility, and a real-time power monitoring function. The new Precision(S) series also possess the excellent beam quality (M2 <1.2) and the ultra-long lifetime. It enables efficient and high-quality laser micro-machining processes.

The AONano Precision(S) laser series adopt AOC's world-leading intra-cavity harmonic generation technology. It has the highest harmonic generation conversion efficiency in the industry. The laser power can be optimized at high repetition frequency. Thus, the laser can be used in many applications and improve the processing efficiency for the customers. The laser can be controlled by TTL signals and PWM signals. The laser output power can be controlled through PWF in the laser GUI or the duty cycle of external PWM signals.

The Precision(S) lasers are the best choice for high precision micro-machining, marking-on-the fly in packaging line, FPC/PCB cutting, and other applications.

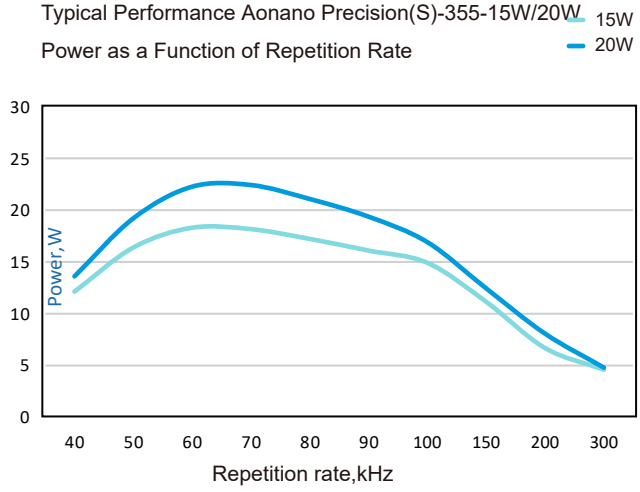


FPC/PCB cutting&drilling

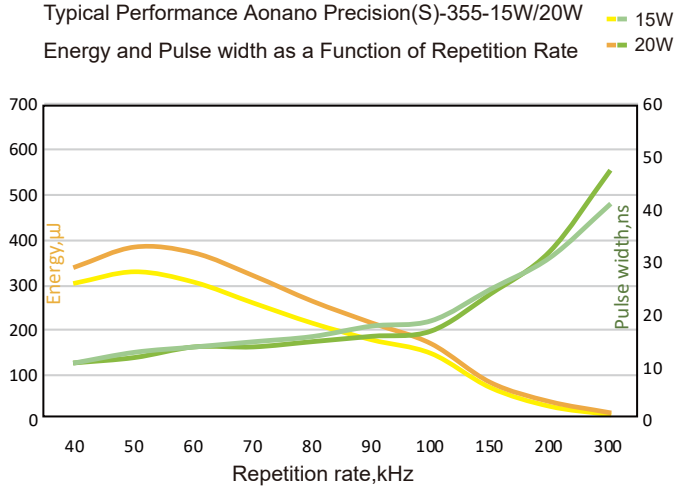
Marking on the fly

PI cutting

Typical Performance Aonano Precision(S)-355-15W/20W
Power as a Function of Repetition Rate



Typical Performance Aonano Precision(S)-355-15W/20W
Energy and Pulse width as a Function of Repetition Rate



	AONano Precision (S) 355	
Specification	**15W - 50K**	**20W - 60K**
Wavelength (nm)	355	
Average Power (Watts)	>15W@50KHz	>20W@60KHz
Energy (μJ)	>300	
Specified Repetition Rate(kHz)	50	60
Repetition Rate (kHz)	30~150	
Pulse Width (ns)	<15	<20
Beam Quality (M^2)	<1.2	
Beam Roundness (%)	>90	
Beam Diameter (mm)	0.4~0.8	
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.)	< 20	
Standby Warm-Up (mins.)	< 10	
Operational Temperature Range (°C)	0-35°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)	24/300	
Communication	RS232	
Cooling	Water	
Weight (kg)	7.1	

AONano Precision(S) SERIES

AONano Precision(S) -355 Laser CAD Drawing