

AONano Precision - 355 - LP

Industrial UV nanosecond laser



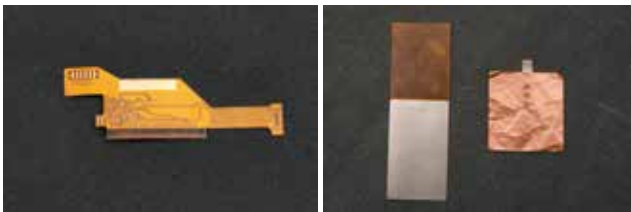
Features & Benefits:

AONano Precision-355-LP laser adopts a compact all-in-one design, which effectively simplifies the design of the customer's equipment, making the installation and integration easier and more convenient. The design that organically combines the laser's electrical control part and the optical part greatly reduces the risk of possible failure caused by excessive external wiring connections and improves the overall stability of the user's equipment. The water-cooled cooling style, solid cavity structure, and stable design make it a perfect combination of performance and stability and is applied for various challenging applications.

AONano Precision series is an upgraded version of the original AWAVE laser, with excellent performance. In addition to maintaining the original excellent beam quality ($M2 < 1.1$), it also expanded the laser's operating frequency range from 30-150kHz to 20-300kHz, and optimized the laser power at high frequency, so that the laser can adapt to more application and improve the processing efficiency of customers. It adopts Inno Laser's world-leading inner cavity harmonic generation technology and its industry-leading photoelectric conversion efficiency, making it a solid-state UV laser with the lowest energy consumption.

AONano Precision-355-LP-14W-50K, which can meet most requirements to the power of customers for nanosecond UV long pulse width lasers. The FORMULA series lasers can be operated with TTL level signals and PWM pulse width modulation signals. The PWF function allows customers to adjust the power output of the laser in the internal control mode through software.

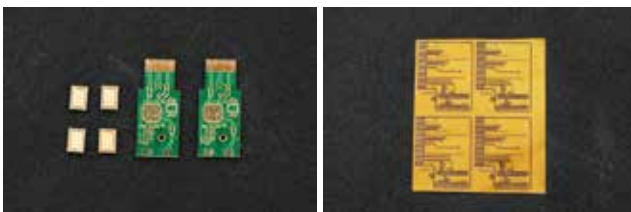
The long pulse width characteristic, excellent beam quality, wide repetition rate, flexible control mode, and comprehensive power coverage make it a perfect choice for the application of FPC copper foil drilling, thick fingerprint module cutting, thick FPC/PCB cutting(connecting finger), metal cutting(tungsten), etc.



FPC/Copper foil drilling



Thick fingerprint module cutting



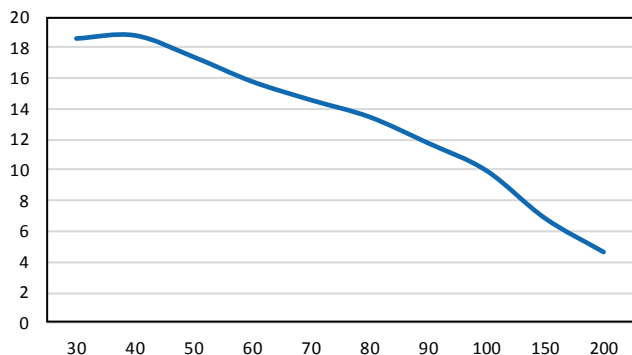
Thick PCB/FPC(Connecting finger)Cutting



Metal cutting (Wolfram)

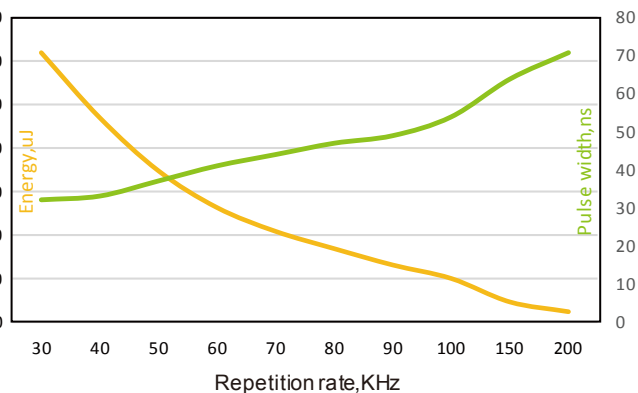
Typical Performance AONano Precision-355-LP

Power as a Function of Repetition Rate



Typical Performance AONano Precision-355-LP

Energy and Pulse width as a Function of Repetition Rate



AONano Precision 355 LP	
Specification	14W - 50K
Wavelength (nm)	355
Average Power (Watts)	>14W@50KHz
Energy (µJ)	>280
Specified Repetition Rate(kHz)	50
Repetition Rate (kHz)	40~300
Pulse Width (ns)	>36
Beam Quality (M ²)	<1.2
Beam Roundness (%)	>90
Beam Diameter (mm)	~1 ~0.47
Beam Divergence (mRad)	< 2
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
Communication	RS232
Cooling	Water
Weight (kg)	20

AONano Precision-355-LP SERIES

AONano Precision-355-LP Laser Size

