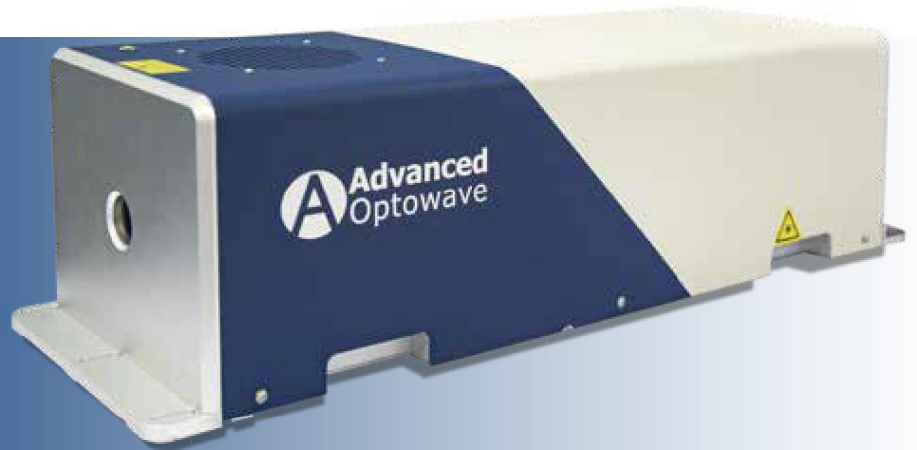


# AONano Precision-DiamondCut Series

Industrial Green nanosecond laser

- Up to 3 mJ pulse energy
- Long pulse width
- Excellent beam quality
- Diamond processing



## ► Features & Benefits:

This is the high power energy version of our AONano Precision-532 laser series. The all-in-one design makes the laser more compact and reduces the total weight. It saves space for installation on the customer side, lowers the integration cost and simplifies the installation process. 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 of 15W and 20W are available for selection. The pulse energy is up to 3mJ with repetition rate from 5kHz to 30kHz. With its long pulse width of 90 ns, excellent beam quality, it is perfect candidate for super-material cutting, polishing, marking and engraving, especially for diamond.



Diamond cutting



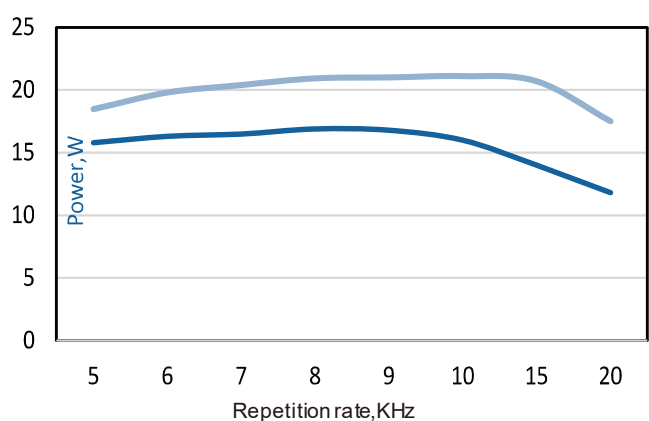
Carbon fiber cutting



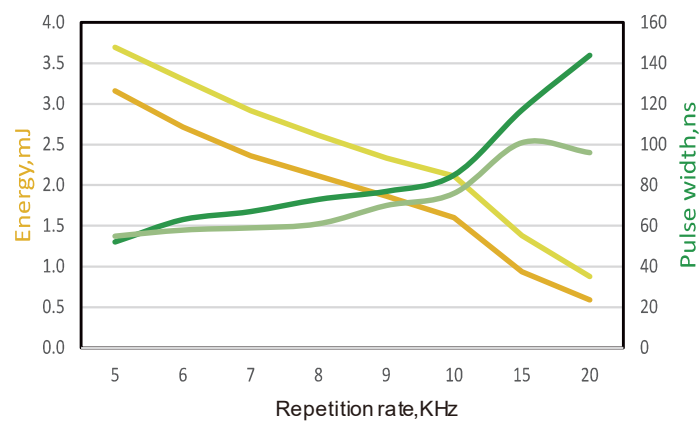
Mobilephone module/Fingerprint module cutting



Typical Performance DiamondCut Green 15W/20W  
Power as a Function of Repetition Rate



Typical Performance DiamondCut Green 15W/20W  
Energy and pulse width as a Function of Repetition Rate



DiamondCut 532		
Specification	15W-8K	20W-8K
Wavelength (nm)	532	
Average Power (Watts)	>15W@8KHz	>20W@8KHz
Energy (mJ)	> 1.8	>2.5
Specified Repetition Rate(kHz)	8	
Repetition Rate (kHz)	5-20K	
Pulse Width (ns)	~75	
Beam Quality (M <sup>2</sup> )	<1.2	
Beam Roundness (%)	>90	
Beam Diameter (mm)	~1	
Beam Divergence (mRad)	<2	
Point Stability (μrad/°C)	<20	
Polarization Ratio	100:1 Linear, Vertical	
Pulse-to-Pulse Stability (% RMS)	<2	
Average Power Stability(% over 12 hours)	<3	
Cold Start Warm-Up (mins.)	<40	
Standby Warm-Up (mins.)	<10	
Operational Temperature Range (°C)	15 to 35	
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	
Laser head (kg)	26	

# AONano Precision DiamondCut SERIES

## AONano Precision DiamondCut Laser Size

