

## Poplar Mid-Power UV

### Nanosecond Integrated Laser



- ⦿ Integrated design, compact all in one laser
- ⦿ Technical performance indicators reach the international advanced level, high reliability
- ⦿ Short pulse width under high repetition rate for minimum heat affected zone, high efficiency
- ⦿ Frequency tripling point moving function ensure long service life

#### Application.



PCB/FPCB



Ceramic Cutting



Glass Marking



Sapphire Marking



Wafer Cutting



LED Dicing

#### Specifications: [POPLAR-355-12](#) · [POPLAR-355-18](#)

POPLAR series Mid Power nanosecond UV laser, adopt new compact design, ease of integration and delivery. Poplar realized short pulse width under high repetition rate for minimum heat affected zone and high efficiency. Frequency tripling point moving function ensure long service life. On-line monitoring function is optional, applicable to the harsh working conditions of industrial machining requirements.

This series of products is mainly applied to high-end market of ultra-precision machining, including the fields of PCB/FPCB cutting and splitting, ceramic material perforation and scribing, glass/sapphire/wafer cutting, LED substrate wafer scribing, etc.

**Huaray**

WUHAN HUARAY PRECISION LASER CO., LTD.

# Poplar Mid-Power UV Laser Datasheet

SPECIFICATIONS	Poplar-355-12	Poplar-355-18
Fundamental Center Wavelength	355nm	
Output Power and Energy	>12W, >150μJ@80kHz	>18W, >300μJ@60kHz
Repetition Rate	50kHz-200kHz	
Pulse Width	<15ns@80kHz	<15ns@60kHz
Spatial Mode	TEM <sub>00</sub> (M <sup>2</sup> ≤1.2)	
Beam Divergence	≤2mrad	
Astigmatism	<0.2	
Beam Circularity	≥90%	
Polarization Ratio	>100:1	
Polarization Direction	Horizontal	
Beam Pointing Stability	<25μrad/°C	
Pulse Energy Stability	≤3%RMS	
Power Stability	≤5%RMS	
Long-term Pointing Stability	<25μrad/°C	
External Comms	RS-232	
Beam Diameter, 0.3m in Front of Laser	≤4mm (With 2x Beam Expander) ≤8mm (With 5x Beam Expander)	
Working Material	Nd:YVO <sub>4</sub>	
Warm-up Time	<15min	
Operating Temperature	+10 to +35°C	
Operating Humidity	<65%	
Non-Operation(Storage) Temperature	-10 to +45°C	
Shipping Temperature(Non-condensing)	-10 to +45°C	
Cooling	Water	
Power Supply(Consumption)	110/220V AC, 50/60Hz ( 800W )	
Classification	Class 4	
Head Weight	31.5kg	

## Mechanical Specifications

