

# UV Nanosecond Laser

## HL SERIES

HL-NS-355-30(M)-S



With the unique cold processing advantage of UV light, it is widely used for cutting, drilling, marking and etching of materials in the high-end market of ultra-fine processing.

### ► Application

- PCB/FPC board marking, cutting and drilling
- Solar cell process
- Ink removal, PVD layer removal
- Scribing, cutting and drilling of ceramics
- Wafer scribing

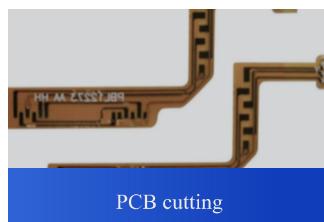
### ► Features

- Modular design for easy upgrade and maintenance
- TEM<sub>00</sub> mode output
- Adjustable repetition rate

### ► Sample Display



Fireproof materials



PCB cutting



Stainless steel colouring



3µm micro-drilling  
in stainless steel shims

Technical Parameters

HL-NS-355-30(M)-S

**Optical Parameters**

Wavelength	355 nm
Max. Power	30 W@80 kHz
Repetition Rate	70 kHz~200 kHz
Pulse Width	20 ns-100 ns
Pulse Energy Stability (rms)	< 3% rms@ 80kHz
Power Stability	< 2% rms

**Beam Characteristics**

Spatial Mode	TEM <sub>00</sub>
Beam Quality	M <sup>2</sup> < 1.3
Polarization Ratio	> 100:1 (horizontal)
Beam Diameter at Exit	1.4 mm ± 0.2 mm
Divergence Full Angle (1/e <sup>2</sup> )	< 2 mrad
Circularity	> 90%
Beam Pointing Stability	≤ ± 25 µrad/°C

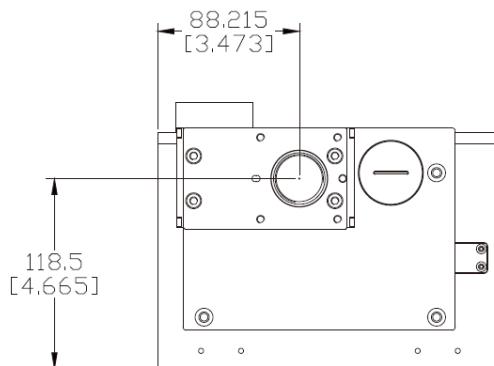
**Working Conditions**

Power Supply	36VDC ± 1V; ≥600W switching power supply
Warm-up Time	Standby to ready < 10 minutes; cold start to readiness < 30 minutes
Temperature Range	15~30°C during working hours; 0~50°C during non-working hours
Temperature Range	10~70%, non-condensation
Cooling Requirements	Water cooling, cooling capacity ≥ 100W, accuracy ± 0.1°C, flow rate ≥ 10L/min

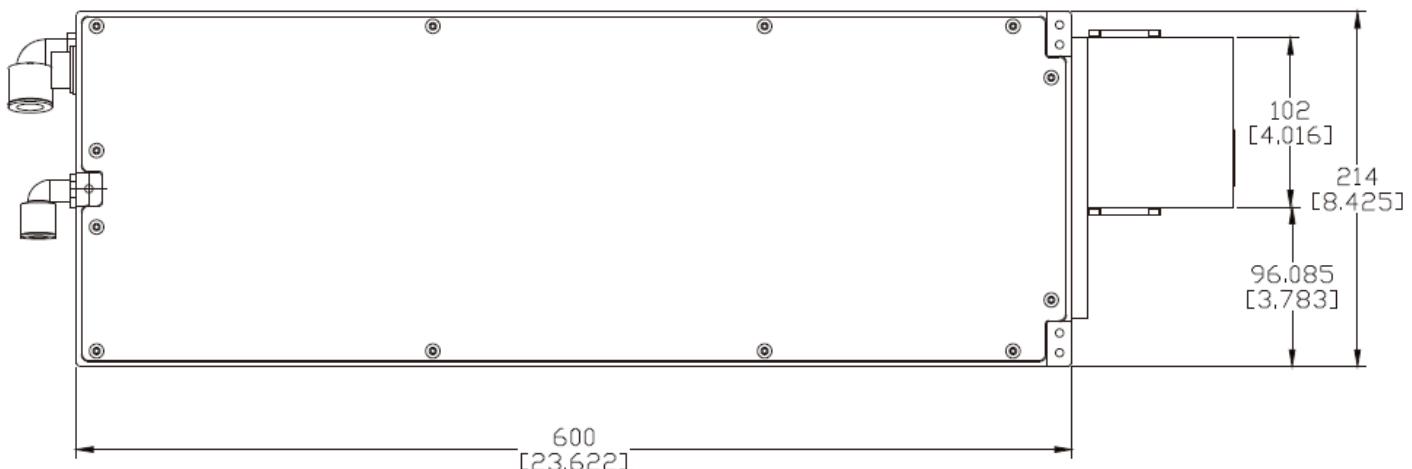
**Physical Properties**

Laser Dimensions	698 mm×214 mm×165.9 mm (L x W x H)
Laser Weight	32 kg

► All specifications are typical data and subject to change without notice due to product improvements.

Laser Dimensions (mm)

Front View

Bottom ViewSide View