HAN'S COMPONENTS

UV Nanosecond Laser

HL SERIES

HL-NS-355-20-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

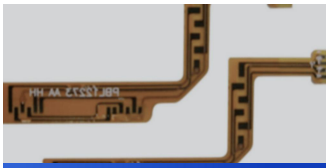
- Modular design for easy upgrade and maintenance
- TEM_{00} mode output
- Adjustabl repetition rate

▸ Features

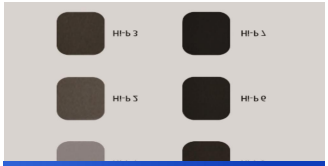
- PCB/FPC board marking, cutting and drilling
- Solar cell process
- Ink removal, PVD layer removal
- Scribing, cutting and drilling of ceramics
- Wafer scribing

▸ Sample Display

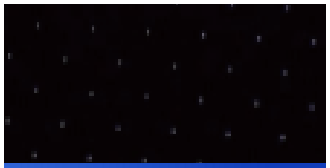
Fireproof materials



PCB cutting



Stainless steel colouring



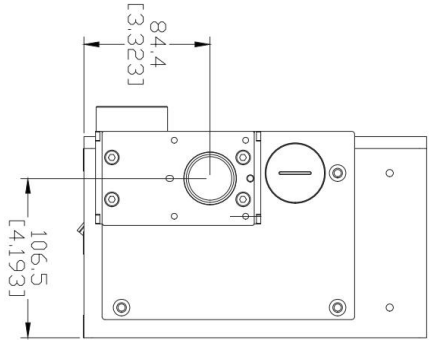
3μm micro-drilling
in stainless steel shims

Technical Parameters

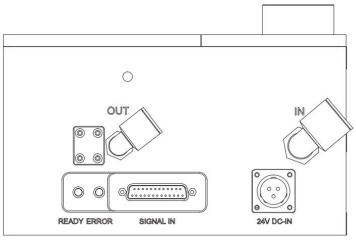
	HL-NS-355-20-S
Optical Parameters	
Wavelength	355 nm
Max. Power	20W@80kHz
Repetition Rate	60kHz~200kHz
Pulse Width	20ns-100ns
Pulse Energy Stability (rms)	＜3% rms@80kHz
Power Stability	＜2% rms
Beam Characteristics	
Spatial Mode	TEM_{00}
Beam Quality	M^2＜1.3
Polarization Ratio	＞100:1(horizontal)
Beam Diameter at Exit	1.4mm ± 0.2mm
Divergence Full Angle ($1/e^2$)	＜2 mrad
Circularity	＞ 90%
Beam Pointing Stability	≤±25 μrad/℃
Working Conditions	
Power Supply	24VDC±1V; ≥400W 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	598mm×230mm×154.7mm（L x W x H）
Laser Weight	25 kg

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

Laser Dimensions (mm)

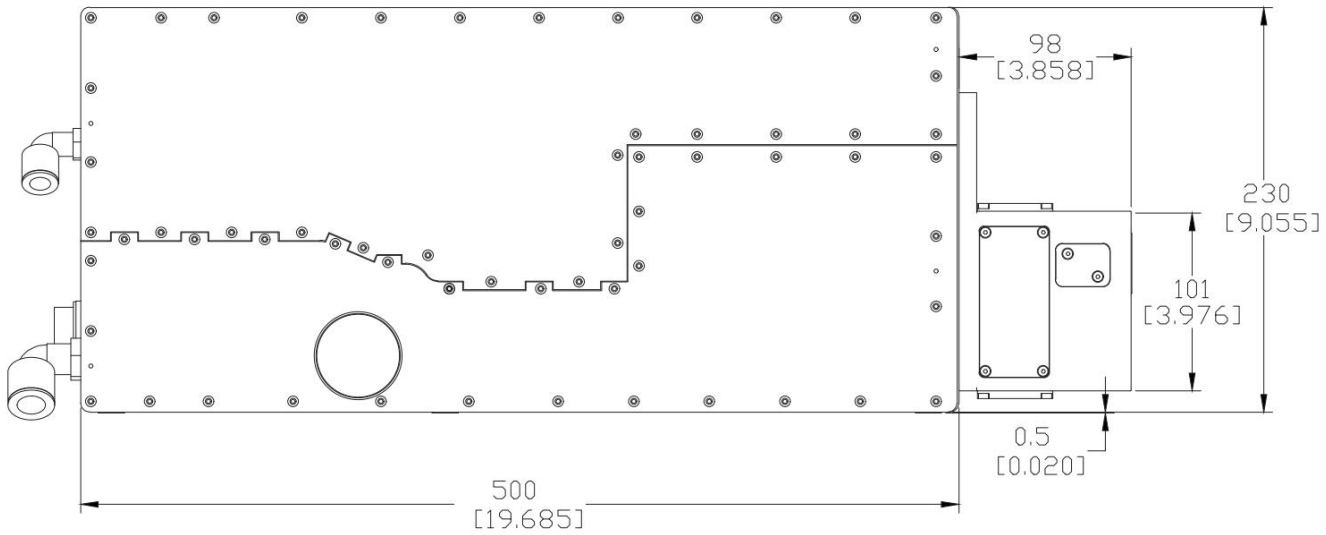


Front View



Back View

Top View



Side View