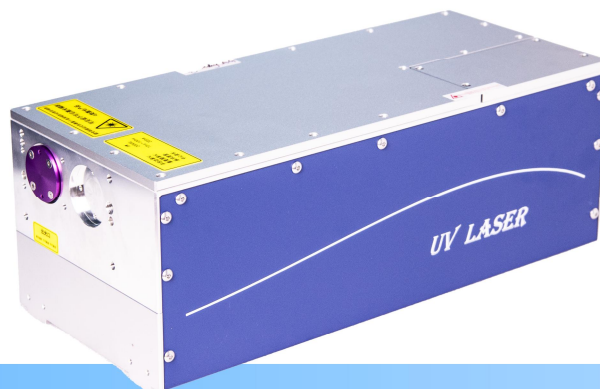# UV Nanosecond Laser

ZG SERIES

ZG-NS-355-5

The new ZG series adopts intra-cavity frequency doubling technology for applications in precision marking processes. With its superb cost performance, it is widely used in the extreme manufacturing field.
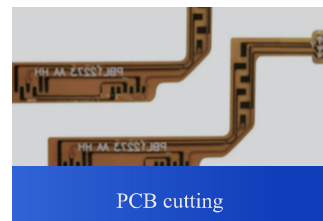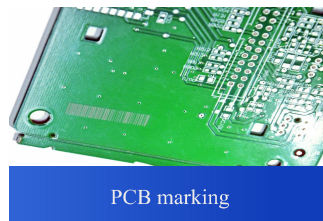
▶ Application

- Small size, light weight and price-competitive
- Opto-mechanical integration design
- EM_{00} mode output
- Adjustable repetition rate

▶ Features

- High-end electronic products appearance logo
- PCB, EPC QR code marking
- Metal or non-metal plating removal
- Marking of air switches, low-voltage appliances (flame retardant materials)
- Food, PVC pipe, pharmaceutical packaging, cable wire (HDPE, PO, PP, etc.) material marking

▶ Sample Display

| Marking of plastic wires | Marking on mobile phone back | PCB marking | PCB cutting |

Technical Parameters

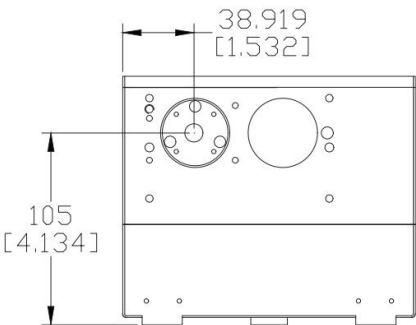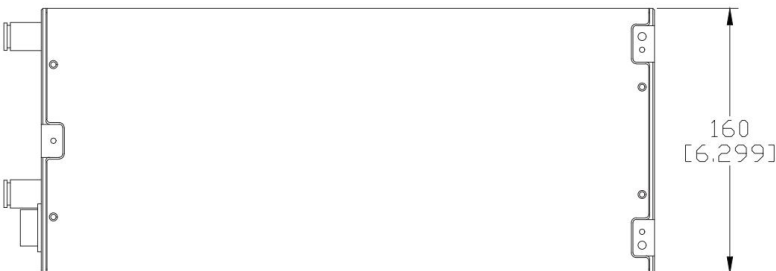|	ZG-NS-355-5
Optical Parameters	
Wavelength	355 nm
Max. Power	5W@30kHz
Repetition Rate	20kHz~200kHz
Pulse Width	20ns-100ns
Pulse Energy Stability (rms)	＜3% rms
Power Stability	＜2% rms
Beam Characteristics	
Spatial Mode	TEM_{00}
Beam Quality	M^2＜1.2
Polarization Ratio	＞100:1(horizontal)
Beam Diameter	1.1mm ± 0.2mm
Divergence Full Angle (1/e²)	＜2 mrad
Circularity	＞ 90%
Beam Pointing Stability	≤±25 μrad/°C
Working Conditions	
Power Supply	12VDC±1V; ≥200W 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≥200W, accuracy±0.5°C, flow rate≥4L/min*
Physical Properties	
Laser Dimensions	369.5mm×160mm×136mm（L x W x H)
Laser Weight	11kg

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

▶ *Recommended Chiller→Brand: HANSUN, Cool Model: HC002M1-02A.
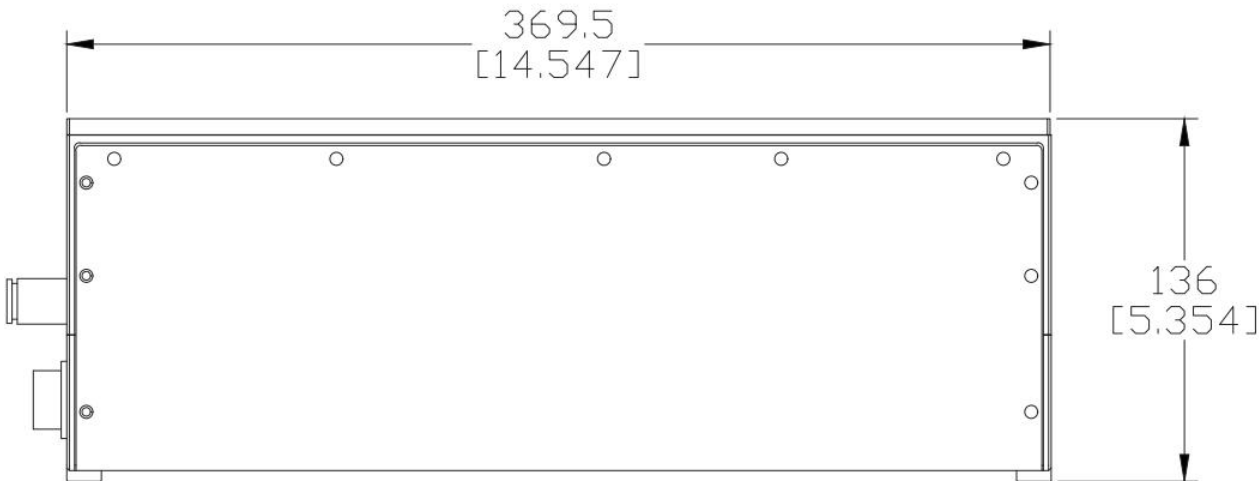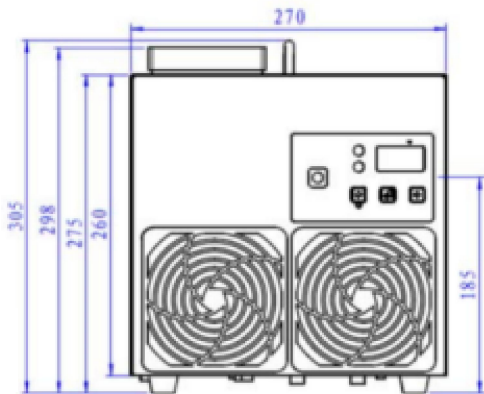
Laser Dimensions (mm)
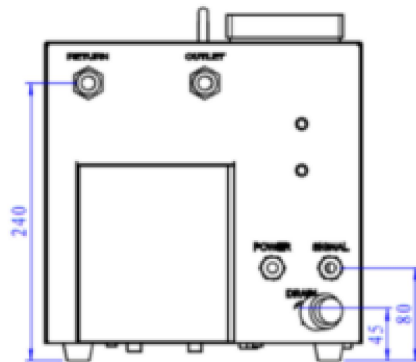

Front View

Top View

Side View

369.5
[14.547]

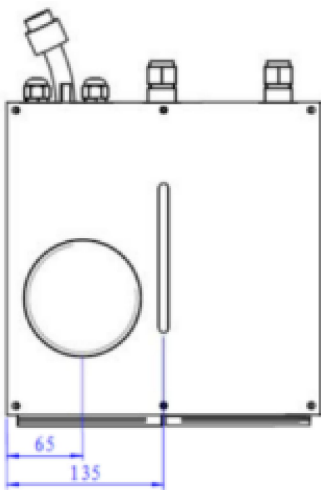136
[5.354]

Water Chiller Dimensions (mm)
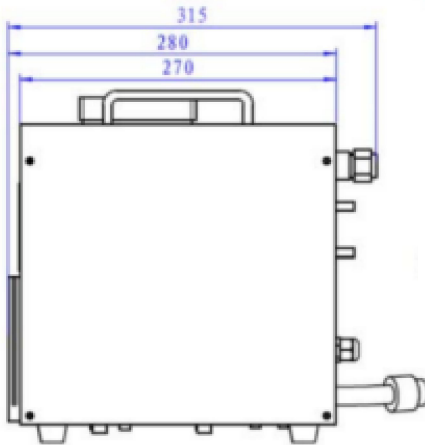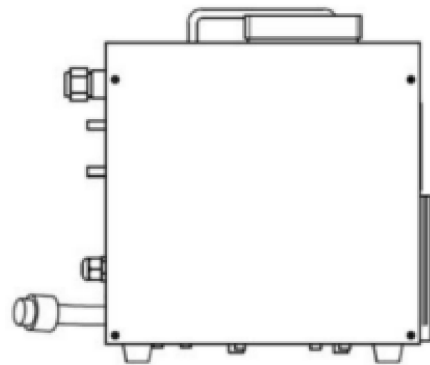
HC010H1-02A
270mm x 315mm x 305mm (L × W × H)

Front View

Back View

Top View

Side View

Side View