

Green Light Picosecond Laser

HL SERIES

HL-PS-532-30



This series is used in the processing of brittle materials and super-hard materials, and can effectively address the micro-machining bottlenecks in industries such as panel displays, photovoltaics, and semiconductors.

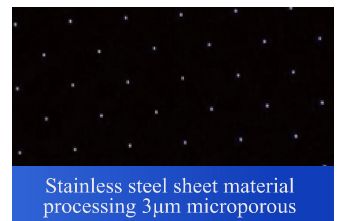
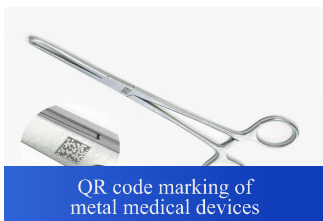
► Application

- Using independently developed seed sources
- Selectable burst pulse train quantity and frequency division quantity
- POL/POD function
- 7*24 hours, long-term stable operation
- Single pulse ~ 4MHz repeat frequency adjustable

► Features

- High-end electronic products appearance logo
- Processing traceability marks with anti-acid corrosion and anti-oxidation functions on metal medical devices
- Cutting and drilling on plastics, oxides and organic materials, or removal of surface coatings
- Ultra-precise markings and invisible QR codes finely marked on glass material
- Replacing chemical corrosion processing depth on metal materials
- Precision moulding of superhard materials

► Sample Display



Technical Parameters

HL-PS-532-30

Optical Parameters

Wavelength	532 nm
Max. Power	30 W
Repetition Rate	Single pulse-4000kHz
Pulse Width	< 10 ps
Pulse Energy Stability (rms)	< 2% rms
Power Stability	< 2% rms

Beam Characteristics

Spatial Mode	TEM ₀₀
Beam Quality	M ² < 1.3
Polarization Ratio	> 100:1(horizontal)
Beam Diameter	2.0mm ± 0.2mm
Divergence Full Angle (1/e ²)	< 2 mrad
Circularity	> 90%
Beam Pointing Stability	≤ ±25 μrad/°C

Working Conditions

Power Supply	100~240V, 50~60Hz
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
Humidity Range	10~70%, non-condensation
Cooling Requirements	Water cooling, cooling capacity ≥ 1000W, accuracy ± 0.1°C, flow rate ≥ 6L/min

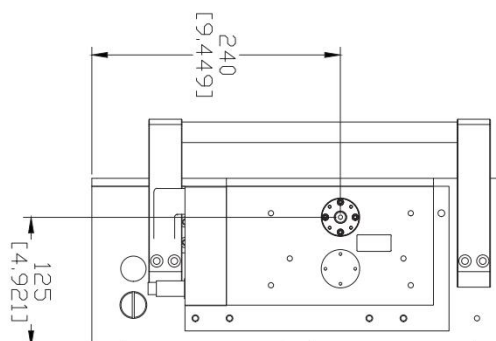
Physical Properties

Laser Dimensions	850mm×400mm×163mm (L x W x H)
Laser Weight	67.5 kg
Controller Dimensions	440mm×432mm×132mm (L x W x H)
Controller Weight	19.3 kg

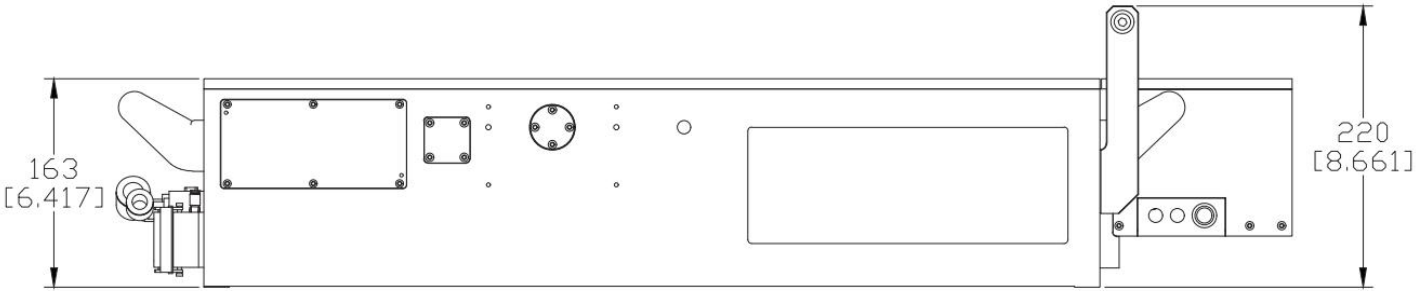
► All specifications are typical data and subject to change without notice due to product improvements.

Laser Dimensions (mm)

Front View



Side View



Top View

