

Pulsed CO2 Laser

HLD SERIES

HLD-120, HLD-200, HLD-100i, HLD-180i



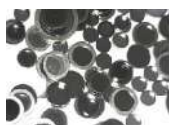
► Applications

- Mobile phone housing processing;
- PCB, FPCB micro-hole processing
- Plastic precision cutting
- Glass cutting and cladding
- Non-metal marking: leather, scriptures, etc.
- Auto parts processing
- Logo precision cutting

► Features

- Integrated compact design for seamless system integration
- Premium imported core components enabling stable power output
- Advanced water-cooling and hermetic sealing technologies
- IP66-rated dustproof construction for various industrial applications.
- Precision machining capability with minimized heat affected zone

► Sample Display



Earbud diaphragm processing



Tablet PC shell processing



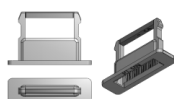
Wire stripping



Matte finishing of phone back covers



Tire marking



Deburring of small parts



Resin removal



Phone case hole cutting

Technical Parameters

	HLD-120	HLD-200	HLD-100i	HLD-180i
Optical Parameters				
Wavelength	10.3 to 10.8 μm		9.2 to 9.4 μm	
Average Power	110 W	200 W	100 W	160W
Beam Quality (M²)	< 1.2			
Output Power Adjustment Range	10 to 110 W	10 to 200 W	10 to 100W	10 to 160 W
Max. Effective Peak Power	250 W	500 W	250 W	375 W
Min. Pulse Period	10μs (equivalent 100 kHz)			
Pulse Energy Range	5 to 150 mJ	5 to 300 mJ	5 to 200 mJ	5 to 300 mJ
Modulated Pulse Width Range	3 to1000 μs			
Duty Cycle	≤ 60%			
Output Power Stability	<± 6%			
Beam Diameter (1/ e²)	6.5 ± 1 mm		6.0 ± 1 mm	
Divergence Full Angle	< 2±1 mrad			
Beam Ellipticity	0.83 to 1.2			
Polarization (Parallel to Mounting Base)	Linear > 100: 1			
General Parameters				
Input DC Voltage	48 V ± 1%			
Max. Input DC Current	30 A	50 A	30 A	50 A
Thermal Load	1.5 KW	2.5 KW	1.5 KW	2.5 KW
Min. Cooling Water Flow	4.5(Lpm)	5.7(Lpm)	4.5(Lpm)	5.7(Lpm)
Cooling Water Temperature	10 °C to 35 °C			
Cooling Water Temperature Stability	±1.0°C			
Cooling Water Pressure (Inlet)	205 to 520 kPa			
Physical Properties				
Laser Dimensions	898 mm × 192 mm × 204 mm (L×W×H)			
Laser Weight	26.5 KG	28 KG	27 KG	28 KG

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

Laser Dimensions (mm)

