

PRC-WELD-3000-A

Intelligent Handheld Laser welder



3 kW Welding capacity

Mild Steel	8~9 mm
Stainless Steel	8~9 mm
Aluminum	6~7 mm

Intelligent Handheld Laser welder **PRC-WELD-3000-A**

Product Specification parameter	PRC-Weld-3000-A
Output power (W)	3000
operating mode	CW
Output Power Range (%)	5-100
Output laser wavelength (nm)	1080±10
Delivery Fiber Core Diameter(μm)	M ² ≤4.5
Respond Time (μs)	< 100
Cable Length (m)	10±0.5 (Customizable)
Cooling Method	Active air cooling
Ambient Temperature Range (°C)	-20~50
Input Voltage	380VAC/50Hz
Power Consumption (kWh)	10
Dimension (mm)	410 x 960 x 850 (L×W×H)

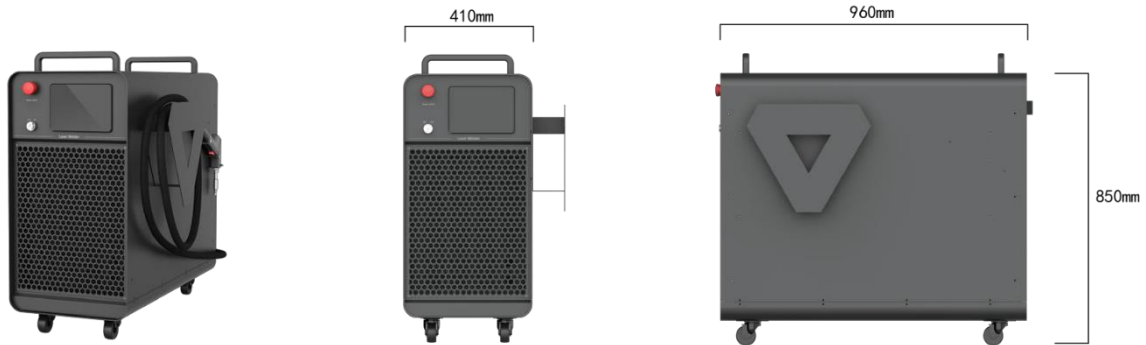
For more information contact sales.europe@prclaser.com

www.prclaser-europe.be

PRC-WELD-3000-A

Intelligent Handheld Laser welder

Unit: mm




Using the world's first active air-conditioned (AAC) direct-cooling technology, it operates reliably and continuously from -20°C to $+50^{\circ}\text{C}$, independent of ambient temperature. Its small fiber-core design significantly enhances beam quality at equal power, delivering high energy density and stable welding performance, even during long-duration welding operations.


Advantages

- 1、Triple protection design, built-in air/gas pressure detection device, welding anti-stick;
- 2、Based on 976nm pumping technology, EO conversion rate of optical module is $\geq 42\%$;
- 3、Strong environmental adaptability, with an operating temperature range of -20°C to $+50^{\circ}\text{C}$;
- 4、Includes 55 built-in application process data sets, selectable by scenario, eliminating extensive process trial-and-error. Operators can get started quickly and easily.

 EO conversion
efficiency $\geq 42\%$

 Easily welds high
reflective materials

 SMAT Intelligent
operating system

 Continuous 24h
welding operations

The professional performance laser series of PRC are aimed at customers who have the pursuit of high product performance, and high product functionality requirements. The product is designed to meet first-tier brand standards, offering superior performance, comprehensive functionality, and generous design redundancy to create more value-added potential for customers.

1. AAC direct-cooling keeps laser-chip temperature fluctuations extremely low, ensuring long-term stable and reliable operation.
2. ABR ultra high-reflection-resistance technology enables easy welding of highly reflective materials.
3. Self-developed SMAT intelligent-operation platform provides simple, intuitive, and efficient control.

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Applications

A wide range of welding materials: different thickness of steel (such as carbon steel, galvanized steel), aluminum alloy, copper, stainless steel, etc., widely used in kitchen, guardrail, doors and windows and other hardware welding market.



Metal Furniture



Electrical Cabinet



Elevator Manufacturing



Door/Window Guardrail



Battery Welding

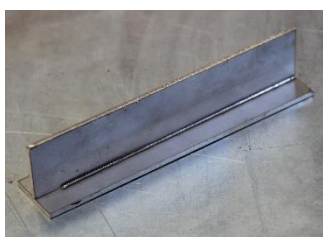


Kitchenware



Light & Decoration

Welding Samples



Stainless Steel Welding



Aluminum Welding



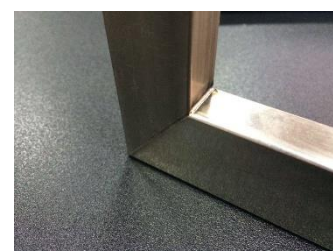
Mild Steel Welding



Pipe Construction Welding



Exhaust Welding



Construction Welding

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Packing List and Optional Accessories

Power cable	QBH delivery	Wire feeder (Optional)
Laser welder body	cable(5m/10m) Handheld	Welding helmet (Optional)
User Manual	Welding gun Welding nozzles different types	Goggles (Optional)



Automatic Single Wire feeder



Automatic Dual Wire Feeder

Welding Nozzles for different welding application



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PRC-WELD-3000-A

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The 3kW welding gun has been developed with an ergonomic design, for smooth and easy operation. Suitable for continuous welding operations with high quality and safety!



PRC Laser Welding Helmet with Double Safety Interlock
&
Eye-safe protection for Fiber laser wavelength & IR + UV light



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Legal Disclaimer:

PRC laser products are designed in strict accordance with safety regulations. All products are in accordance with international standards and regulations currently in force in the country. Each PRC laser products has safety warning signs as shown here.



Legal Notice: All product information is believed to be accurate and subject to change without notice.

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