



Handheld laser cleaning machine



Time-Saving



Modular Control



Easy Operation

Experienced Manufacturer, Quality Assurance



Why choose us



R&D Capability

Shenzhen Dapeng Laser Technology Co., LTD., founded in 2011, is a national high-tech laser equipment enterprise integrating research and development, manufacturing, sales and service. The four main product lines include more than 150 equipment and solutions including laser marking, laser cutting, laser welding, and laser cleaning machines widely used in auto manufacturing, printing and packaging, electronic components, hardware industry, jewelry hclothing leather, medical equipment, craft gifts and more industries.



Quality Control

In accordance with the ISO 9001 quality control system, we rigorously monitors eachstage including materials, manufacturing processes, assembly, and shipping.



Efficient and Effective Support



We have developed a comprehensive system for production, sales, and after-sales service.

We havea laser industry park in Nantong, Jiangsu, andproduction bases in Shenzhen, Wenzhou, and Suzhou. Additionally, we have a large laser cutting machine production base in Dongguan.

We havealso set up over 20 branch offices in key industrialcities and regions across the country.



Diverse Products



Laser Cutting Machine

Capable of cutting various metal sheets and tubes (additional tube cutting device required), primarily suitable for rapid cutting of materials such as stainless steel, carbon steel, galvanized sheet, electrolytic plate, brass sheet, aluminum sheet, manganese steel, various alloy sheets, and rare metals.



Laser Marking Machine

Widely used for marking graphics and text in various fields including integrated circuit chips, computer components, industrial bearings, watches, electronics and communication products, aerospace components, household appliances, hardware tools, molds, wires and cables, food packaging, jewelry, tobacco, and military applications.



Laser Welding Machine

Suitable for a wide range of industries including aviation, aerospace, automotive, power batteries, machinery manufacturing, shipbuilding, chemical industry, and consumer goods.



Laser Coding Machine

This product is primarily designed for real-time coding of products. It can adapt to various manufacturers, including liquor bottling lines, wine bottling lines, beverage filling lines, pharmaceutical packaging lines, tobacco sorting lines, and more.



Precision Micro-additive Equipment

With a diverse range of products, we offer customized configurations of precision laser marking machines, laser welding machines, and laser cutting machines based on customer requirements.



Non-standard Automation

With a diverse range of products, we specialize in customizing precision laser marking machines for our customers.

We provide a complete set of laser processing solutions and related facilities. Our main product lines include a variety of industrial laser equipment and their associated products, totaling over 200 types. These include laser marking machine series, laser welding machine series, laser cutting machine series, green laser demonstration series, PCB vlander drilling machine series, linear motor series, and more.

Handheld laser cleaning machine

50W/100W/200W/300W/500W



Net weight 85 kg
Gross weight 125 kg

50W/100W/200W/300W/500W



Net weight 85 kg
Gross weight 125 kg

Handheld laser rust removal machine

1000W/1500W/2000W



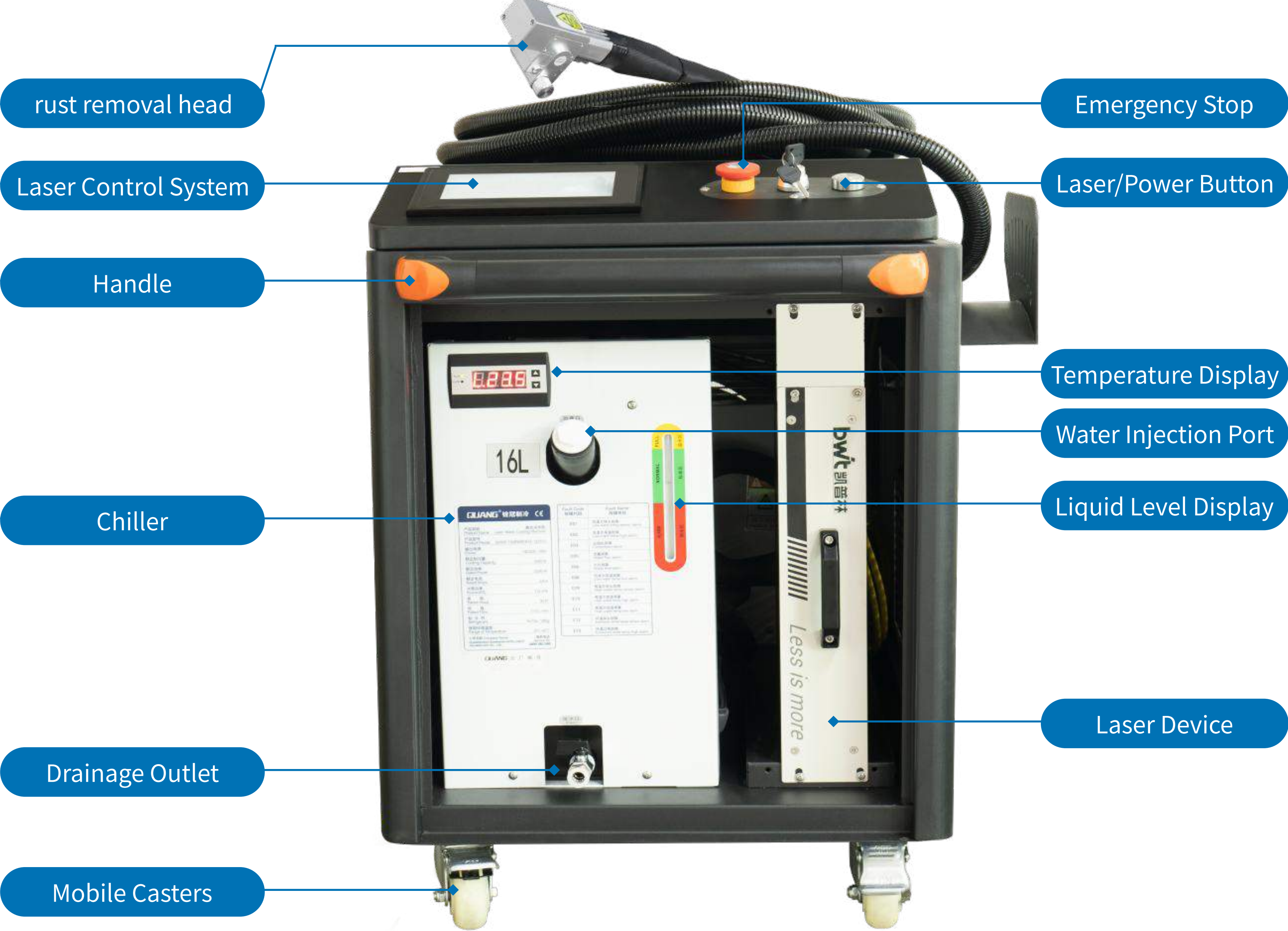
Net weight 130 kg
Gross weight 175 kg

3000W



Net weight 180 kg
Gross weight 265 kg

Structure of the Machine



Front View

- Laser cleaning is employed to eliminate surface contaminants from objects, primarily used for tasks like rust removal from the surface of sheet metal cabinets.
- The advantages of laser cleaning lie in its environmental-friendliness, low labor intensity, non-destructive nature, and precision.
- The vibration effect involves high-frequency laser impacts on the target's surface. The laser beam's rotational motion converts into sound waves that return from the lower layer surface, leading to interference with the incident waves and generating resonance. This results in the fragmentation of contaminants.

Samples



- Laser cleaning features characteristics such as non-abrasiveness, non-contact, absence of thermal effects, and applicability to objects of various materials. It is considered the most reliable and effective solution.

Applications

Applied in mold cleaning, weapon equipment cleaning, removal of old paint from aircraft, cleaning of building exteriors, electronic industry cleaning.

Traditional cleaning display



Comparison of conventional descaling and laser descaling

Model Disadvantages of Traditional Rust Removal	Advantages of Laser Rust Removal
Surface Damage (Corrosion) to Workpieces	Environmental Friendly
Drying Issues After Cleaning Workpieces	Non-contact
Inability to Clean Micro-Nanometer-Level Impurities	High Cleanliness
Waste of Water Resources, Sand, Grinding Heads, etc	No Consumables
Contaminated Cleaning Solvents, Not Environmentally Friendly	Low Operating Costs
Secondary Treatment of Cleaning Solutions After Use	Remote Operation Capabilities
Inability to Achieve Online Cleaning	Online Cleaning Feasibility

Laser Cleaning Machine Machine Parameters

Model	DP-QX100-R	DP-QX200-R	DP-QX300-R	DP-QX500-R	DP-QX500-R
Center wavelength (nm)	1060—1080				
Laser power (w)	100				
Fiber length (m)	5				
Gun head weight (kg)	2				
Cooling method	Water cooling & air cooling				
Operating environment	Ring mirror temperature 10-35℃, relative humidity 30%≤RH≤85%, no condensation or condensation				
Power requirements	220V±5%, 50Hz				
Overall power(kw)	2				
Weight (kg) ±20kg	150				
Safety Level	Class IV				
Overall power protection level	IP54				

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Equipment model features

- The appearance of the machine is simple and user-friendly, making it easy for customers to operate
- Easy to operate, general workers can start operating after 2 hours of training
- Equipment service life is up to 100,000 hours
- Triple safety protection, modular control and safe maintenance guaranteed

Comparison between Traditional Cleaning and Laser Cleaning

Cleaning Metho	Efficiency	Effectiveness	Operation	Environmental Pollution	Consumable Cost
Sandblasting	High	Good, relatively versatile, uncontrollable process, material damage	Offline	Serious pollution	High
Chemical	Moderate	Moderate, poor versatility, uncontrollable process, material damage	Offline	Serious pollution	High
Mechanical Friction	Moderate	Low, uneven, uncontrollable process, material damage	Online	Dust	Moderate
Dry Ice	Relatively High	Good, poor versatility, uncontrollable process	Online	Serious pollution	High
Jet Stream	Relatively High	Good, poor versatility, uncontrollable process, leading to secondary pollution	Offline	Environmental pollution	Moderate
Laser	Relatively High	Good effect, good versatility, controllable process, non-destructive.	Remote	Environmentally friendly	Low

Equipment Configuration

Power	Clean (100W/200W/300W)	Clean 500W/1000W	Rust Removal 1000W1500W/2000W	Rust Removal 3000W
Cabinet	Dapeng Customization			
Laser	Raycus			
Cleaning head/ rust removal head	Dapeng Customization			
Laser Control System	Dapeng Customization			
Chiller	none	none	Han Li SCH 1000W/1500W/2000W	Han Li SCH 3000W

Note: (1) Dapeng’ s customized cabinets, lasers, chillers, and control systems are standard configurations
(2) The rust removal head and cleaning head are optional

Accessories List

Number	Name	Specifications	Quantity (PCS)	Price (Consumables)	Recommended Usage	Remarks
1	Nozzle	Right Angle, Inside Angle, Outside Angle	6	40 yuan per piece	3 pieces	Each type, 3 pieces
2	Lens	D18nm*2nm/ D20nm*2nm	5	30 yuan per piece	1 piece	SUP is D18, Others are D20
3	Wire Feeder Wheel	Model1:(0.8 ~ 1.0) Model2:(1.2 ~ 1.6)	4	/	/	2 pieces for each model
4	Safety Goggles	/	1	/	/	/
5	Data Cable	3m	1	/	/	/
6	Hexagonal Wrench	/	1	/	/	Opening of the cabinet side rear door
7	Storage Box	/	1	/	/	Installing lenses and nozzles
8	Gas Hose	Diameter10*6.5	1	/	/	3m
9	Fiber Optic Protective Sleeve	/	1	/	/	Protecting the laser fiber head

Image



Nozzle



Lens



Wire Feeder Wheel



Safety Goggles



Data Cable



Hexagonal Wrench



Storage Box



Gas Hose



Optic Protective Sleeve

Core Component – Laser



Image

Accessories List

- High-precision automatic mounter
 - Component and COS automatic wire bonding equipment
 - Automated component brightness testing system
- FAC, automatic coupling system for reflective mirrors
 - Component and COS automatic wire bonding equipment
 - High-reliability equipment with independent intellectual property rights

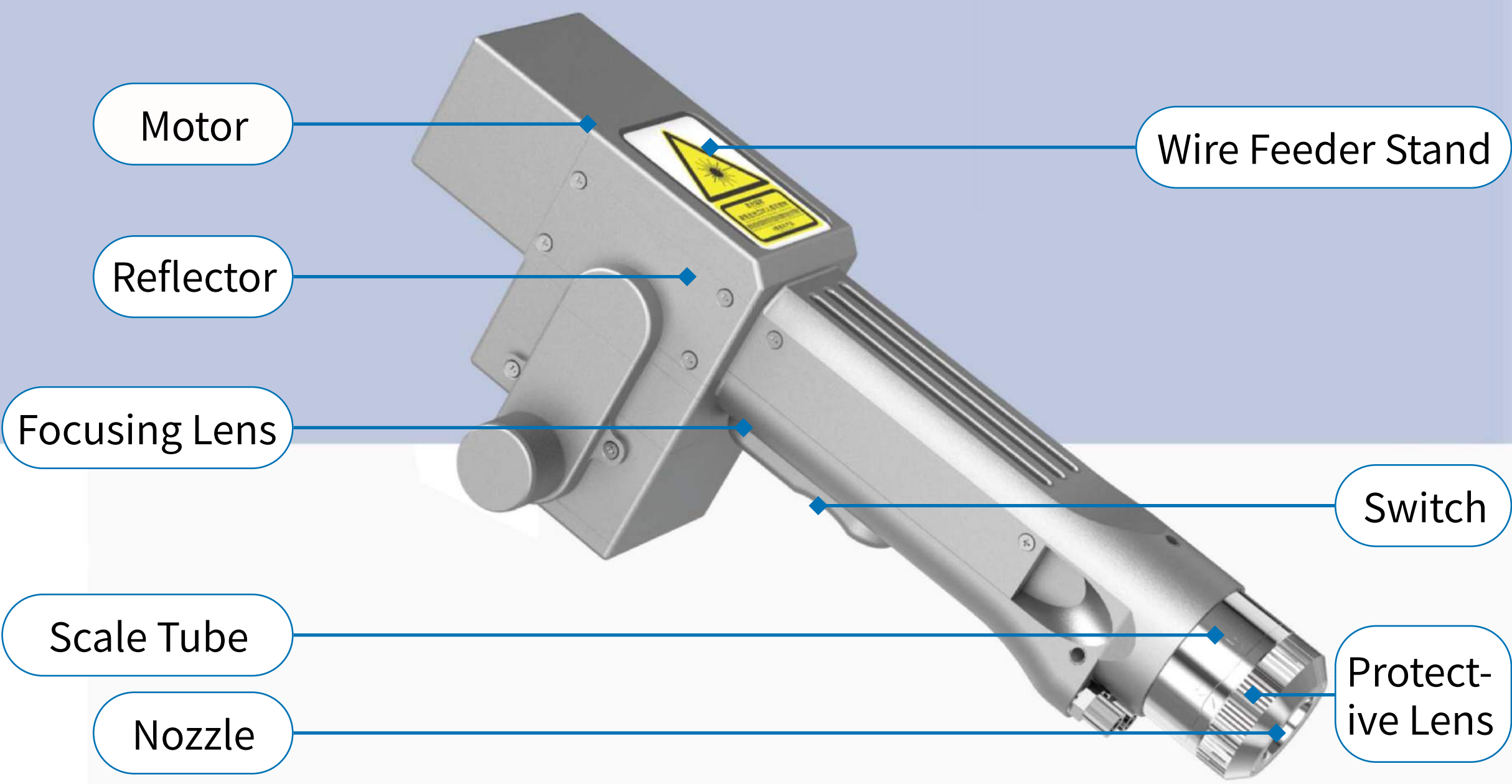
Product Technology

- Strict control of cladding and core alignment for both active and passive optical fibers to prevent optical leakage
 - Optimize the coupling efficiency between pump lasers and beam combiners, and control the internal temperature of the beam combiners
 - High power durability of QBH end faces and meticulous design and production
- Multi-stage residual pump light filtering technology to prevent fiber and fiber bench heating
 - Effective thermal dissipation of active optical fibers and temperature control of the overall structure
 - Strict control of the output beam spot to ensure consistent product performance

Parameters

Model	BFL-CW1000	BFL-CW1500	BFL-CW2000	BFL-CW3000
Laser Power (W)	1000	1500	2000	3000
Fiber Core Diameter	14 ∽ 20 ∽ 25 ∽ 50um	14 ∽ 20 ∽ 25 ∽ 50um	14 ∽ 20 ∽ 25 ∽ 34 ∽ 50um	20 ∽ 25 ∽ 34 ∽ 50um
Output Connector	QBH	QBH	QBH	QBH
Modulation Frequency	0-50KHZ	0-50KHZ	0-50KHZ	0-50KHZ
Voltage(V)	220±20V, AC,PE,50/60HZ	220±20V, AC,PE,50/60HZ	220±20V, AC,PE,50/60HZ	380±20V, AC,PE,50/60HZ
Setting Temperature	25℃ (Laser Module) 30℃ (QBH)	25℃ (Laser Module) 30℃ (QBH)	25℃ (Laser Module) 30℃ (QBH)	25℃ (Laser Module) 30℃ (QBH)
Dimensions (mm)	80*402*296	80*402*346	80*402*346	80*482*521

Core Component Laser Gun



LIGHTWEIGHT,
AS LIGHT AS
0.8KG

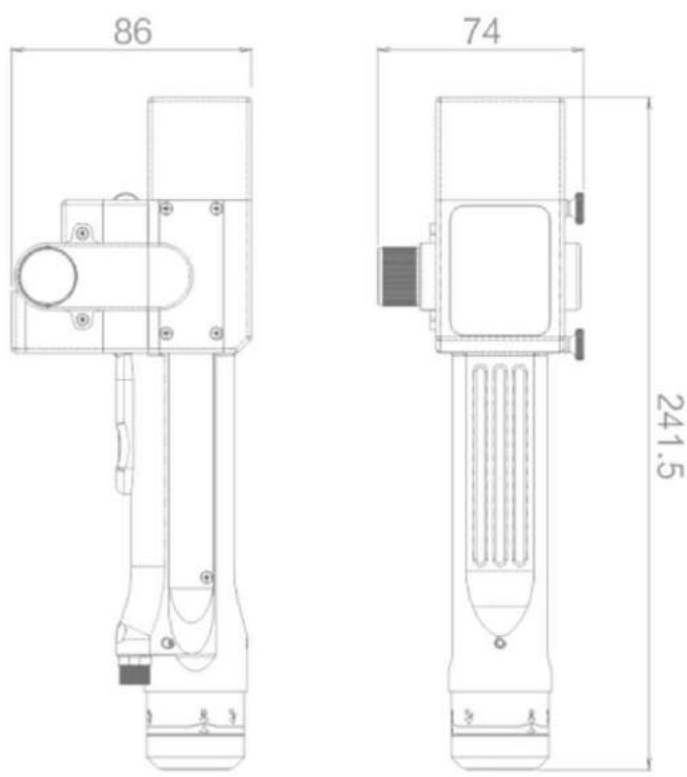


Parameters

Power Range	≤3000W
Collimation Focal Length	D16 F60mm
Focusing Focal Length	D20 F800mm
Maximum Air Pressure	15Bar
Spot Adjustment Range	Line0-300mm
Applicable Wavelength	1070nm
Weight	0.8kg



Dimensions



Safe

Our self-developed safety detection system ensures your protection. The gun head safety lock prevents contamination of the lens when not in use. It features a safety lock and trigger dual-control enablement,



Easy Maintenance

The electrical interfaces perform self-diagnostics, and the focusing lens can be replaced.



Clean and Efficient

With system upgrades supporting F400, F600, and F800, along with various focusing lenses, you can achieve large-area cleaning or high-energy density cleaning as needed.



Cost Reduction and Efficiency Enhancement

With high speed and maximum cleaning efficiency, our system minimizes cost while providing outstanding results. No consumables are needed, making it energy-efficient and environmentally friendly.

Product Features



- Focusing mirrors, collimating mirrors, reflectors and window protective mirrors suitable for our welding and cleaning products
- Made of imported quartz crystal material, suitable for 1500w-3000w, high temperature resistance, laser resistance, double-sided anti-reflection coating

Lens name	Specifications and models	Applicable Products
Protective lenses	D18*2	20S/T、21S/T、23S/T、SW150、30S
	D30*5	22C
	D20*2	21C
Focusing lens	D20*4.5-F150/F200	20S/T、21S/T、23S/T、SW150
	D20*4.5-F400/800	21C、22C
Collimating lens	D20-F60	20S/T、30S
	D16-F60	21S/T、21C、22C、23S/T、SW150
Reflective lens	30*14*2	20S/T、21S/T、23S/T、30S
	20*15.2*1.6	21C、22C、SW150
	15.2*15.2*1.6	SW150

Core Component

Built-in Cabinet Laser Welding Water Cooler



Product Features

- Optional use of environmentally friendly refrigerants
- Laser chiller's intelligent temperature controller features two temperature control modes, suitable for different usage scenarios
- Optional heater and water purification configurations
- Temperature control accuracy up to $\pm 0.5^{\circ}\text{C}$
- Dual-temperature dual-control mode, catering to different cooling needs of fiber laser and laser head
- Durable and easy to operate

Wooden Crate Shipping Packaging Dimensions

Type	DP-QX (100W/200W/300W)	DP-QX (500W/100W)	DP-CL (1000W/1500W/2000W)	DP-CL (3000W)
Net Weight (Cabinet)	85kg	125kg	130kg	180kg
Dimensions (Cabinet)	60cm * 40cm * 60cm	110cm * 65cm * 80cm	110cm * 65cm * 80cm	125cm * 80cm * 115cm
Gross Weight (Including Wire Feeder and Wooden Crate)	125kg	165kg	175kg	265kg
Dimensions (Including Wire Feeder and Wooden Crate)	75cm * 55cm * 80cm	130cm * 85cm * 120cm	130cm * 85cm * 120cm	140cm * 90cm * 134cm

Note: The cabinet can be customized, and the packing size is subject to actual conditions

