

Specification for Raycus laser welding machine



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Parameter Specification			
Machine	1500W 4in1 Laser Welder	2000W 4in1 Laser Welder	3000W 4in1 Laser Welder
Welding Gun Model	FWH30-D10C		
Rated output power: (W)	1500	2000	3000
Center wavelength: (nm) :	1080±5	1080±5	1080±5
Maximum modulation frequency: (kHz)	5	5	5
Output power stability :	±1%	±1%	±1.5%
Red laser	Yes	Yes	Yes
Red light indicates output power	0.5-1	0.5-1	0.5-1



(mW) :			
Output connector:	IQB	IQB	IQB
fiber core diameter (μm)	50	50	50
Beam quality BPP:	< 1.5	< 1.5	1.5-2
Half angle divergence angle (rad) :	< 0.06	< 0.06	
Output cable length (m) :	10	10	10
Fiber core diameter (μm) :	50	50	50
Working voltage (VAC):	220V 50/60Hz Single Phase	220V 50/60Hz Single Phase	380V 50/60HZ Three-phase
Control method :	Control line/Bluetooth, Ethernet	Control line/Bluetooth, Ethernet	RS232/AD/Etherne



power adjustment range (%)	1-100	1-100	10-100
Dimensions (mm)	340×390×80	340×390×80	485*172*727
Cooling method :	Water Cooling	Water Cooling	Water Cooling
Water Tank Capacity	10L		
Cooling medium	Distilled/Deionized Water Add Antifreeze Below 0°C		
Working temperature (°C)	10-40	10-40	10-40
Operating mode	Continuous/pulse		
Laser wavelength	1080nm		
Welding speed	0-120mm/S		
Max Welding	0.35-4mm	0.35-5.5mm	7-8mm



thickness of Steel	(Max 4.5mm)	(Max 6mm)	
Max Cutting thickness of Steel	0-5mm (Max 8mm)	0-6.5mm (Max 10mm)	5-6mm
Max Welding thickness of Aluminum	3mm (Max 3.5mm)	4mm (Max 4.5mm)	5-6mm
Max Cutting thickness of Aluminum	0-2mm (Max 2.5mm)	0-2.5mm (Max 3mm)	4-5mm
Welding Gap	0~4mm(STD Single Wire Feeder) . > 4mm: Optional Dual Wire Feeder		
Rust Removal Width	0-150mm		
Tot. Power	6Kw	8Kw	12Kw
Max. Current	27A	36A	32A
Machine Weight	103.5kg	126kg	180.5kg

Specification for Relfar Single Wire Feeder



Model	FWS-01A
Dimensions	560(L) × 240(W) × 472(H) mm
Gross Weight	16.2kg
Power Supply	220V
Max Wire Weight	25kg
Max Wire Core Diameter	Ø2.0mm
Maximum Wire Feeding Speed	80mm/s
Reduction Ratio	1:5

Specification for Relfar Dual Wire Feeder



Model	FWS-02A
Dimensions	605(L) × 398(W) × 472(H) mm
Gross Weight	22.6kg
Power Supply	220V
Max Wire Weight	25kg
Max Wire Core Diameter	Ø2.0mm
Maximum Wire Feeding Speed	80mm/s
Reduction Ratio	1:5

Specification for Relfar Welding Gun



Model	FWH30-D10C
Fiber Interface	QBH
Wavelength Range	1070±20nm
Rated Power	≤3000W
Collimation Focal	40mm
Focus Focal Length	150mm
Oscillation Type	—、○、∞、Σ、⊙、△、∞
Spot Adjustment Range	0 ~ 5mm
Auxiliary Air Pressure	≥0.1-1MPa
Weight	0.9Kg