LW-F300
Fiber Laser Welder

300W High-quality Single-mode Laser
Stable, high-brightness, high-quality beam

Air-cooled, Space-saving Desktop Design
Water-cooling device is not required

Stable Welding Even during Ambient Temperature Changes & Immediately after Start-up
Digital, high-speed (control period 2μs) optical power feedback control guarantees steady output

Normal Incidence to the Work is Possible
Generator is resistant to reflected light

Supports Seam Welding and High-speed Welding
Continuous, high-speed irradiation of arbitrary laser waveforms

Low Power Consumption Saves Energy
Long life, single emitter laser diode is used in low power consumption laser oscillator design

Application Example

Melt-in Thin & Deep
Micro Focusing
Single Mode Fiber Laser

Melting Example (Stainless Plate)

300W, Air-cooled,
High-speed Digital Feedback Control of Optical Power
Welds Thin Copper/Aluminum Plates and Microscopic Components!

SUS t:0.1 mm × t:0.1 mm
Weld 0.1 mm Thick Stainless Foils
LW-F300 Fiber Laser Welder

Various Laser Output Waveform Controls
- Minimum 0.1msec step setting
- Equipped with seam welding mode
- High speed repetitive output with maximum 5,000Hz frequency
- Color graphic display of preset and output values

<table>
<thead>
<tr>
<th>Feature</th>
<th>LW-F300 Specification</th>
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<tbody>
<tr>
<td>Wavelength</td>
<td>1,070 nm</td>
</tr>
<tr>
<td>Max Rated Power</td>
<td>300 W (Class 4)</td>
</tr>
<tr>
<td>Max Frequency</td>
<td>5,000 Hz</td>
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<tr>
<td>Output Mode</td>
<td>Arbitrary waveform (Single, Repeat, Seam), CW, Analog control</td>
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<tr>
<td>Monitor Display</td>
<td>Laser output(W), Laser energy(J), Average output(W)</td>
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<tr>
<td>Alarm Function</td>
<td>Laser output, Temperature, Electric current, Fiber breakage</td>
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<tr>
<td>Cooling Method</td>
<td>Air cooling</td>
</tr>
<tr>
<td>Power Source</td>
<td>AC 200-240 V ±10%, 1 φ, 50/60 Hz</td>
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<tr>
<td>Max Power Consumption</td>
<td>2.6 kW or less</td>
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<tr>
<td>Dimensions/ Weight</td>
<td>W410 x D600 x H370 mm (excluding protrusion)/ Approx. 58 kg</td>
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Option
Output Head with Camera
- Compact and lightweight design
- Combined with the observation system unit, a welding positioning can be easily done
- Allows customizing welding as required by a variety of applications

Other Avio Laser Welders
For Metal Welding
1kW Fiber Laser Welder
YAG Laser Welder
For Soldering and Plastic Joining
Laser Diode Welder

Requests for Sample Testing are Welcomed. Please Contact Us.

BEFORE OPERATION, read the Operation Manual carefully. This unit should be located away from water, moisture, steam, dust and soot to prevent fire, electrical shock, and operational problems.

*The appearance and specifications are subject to change without notice.