

# **CA Optronics Group, Inc. LWS CA6061 Series Work Bench Laser Welding Systems**

**Technical Specifications Ver 1.01  
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# LWS CA6061 Series Laser Welding Systems

The CA Optronics Group, Inc. LWS Series are end-pumped laser welding systems including the newest generation of semi-conductor laser technology. The systems can be integrated into the top standard configurations appropriate to various applications in the global market due to their excellent features.

## Features

High welding strength/speed, narrow and smooth welding joints, consistent height and high stability

Narrow welding joints and smooth surface

No treatment or simple treatment after welding

Consistent welding and high stability

Tiny width of welding joints, small thermal effect zone, trivial variation of outline dimension and hardness

No pores to prevent material oxidation effect after adding protection gas during welding

Repairable cracks, edge chipping, edges and wearing sealing sides

Low power consumption to save cost greatly

## Applications

Widely employed in welding metals & alloys such as titanium, nickel, zinc, copper, aluminum, chromium, gold, silver, iron and kovar alloy; as well as dissimilar metals such as copper-nickel, nickel-steel, copper-titanium and brass-copper

Variety of industries including communication, digital products, electronic elements, batteries, sensors, clocks, glasses, jewelry, hardware, precise machines, medical appliances, automobile fittings and craft gifts

## LWS Series of System Specifications

| <b>Model#</b>                                 | <b>CA6061-60</b> | <b>CA6061-120</b> | <b>CA6061-300</b> |
|---|------------------|-------------------|-------------------|
| Laser wave length                             | 1,064 nm         | 1,064 nm          | 1,064 nm          |
| Average output power (max.) average output    | 60 W             | 120 W             | 300 W             |
| Maximum single shot energy                    | 30J              | 70J               | 100J              |
| Maximum single shot energy (@3ms pulse width) | 11J              | 30J               | 50J               |
| Maximum peak pulse power                      | 4.5 kW           | 10.5 kW           | 12 kW             |
| Pulse width                                   | 0.1-30 ms        | 0.1-30 ms         | 0.1-20 ms         |
| Pulse frequency                               | 0~100 Hz         | 0~100 Hz          | 0~100 Hz          |
| Stability                                     | < 2%             | < 2%              | < 2%              |
| Maximum power consumption                     | 2.0 KW           | 3.3 KW            | 6.5 KW            |

# CA Optronics Group,Inc.'s Supports, Services and Assistance

CA Optronics Group,Inc. provides high performance, high value, affordable instrument solutions for our customers. Our extensive support sources can help you choose right CA Optronics Group,Inc.'s products for your specific applications and apply them successfully. Every instrument /system we sell has a global warranty. All of our instruments are with at least 18 months factory warranty.

## Our Promise

All of CA Optronics Group,Inc.'s instruments and systems meet their advertised performance and functionality. When you select a CA Optronics Group,Inc.' product, we can help your product operation with our extensive experiences, and provide the basic measurement assistance for the use of special capabilities.

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