

AW2-HP SERIES

High Power GR Industrial Lasers

features & benefits.

- Innovative End-Pumping Technology*
- Average Power Up to 75W*
- Excellent Beam Quality, Pulse Stability & Point Stability*
- Ultra-Compact & Light-Weight*
- Field-Replaceable Diode*
- 24/7 Proven Reliability*
- Low Operational Cost*

AW2-HP Series lasers are high power (>40W) Q-switched, TEM00 mode 532 nm lasers with a multiple mode option, which are engineered for the highly demanding 24/7 production environment, consisting of a laser head and a laser controller connected with a 2.5 meter umbilical cable. The fiber-coupled pumping diodes are located in the laser controller for easy field-replacement. The laser head is sealed in a clean room to assure long term reliability.

AW2-HP Series lasers are featured with pulse frequencies ranging from 1-300 kHz (300 kHz to 1 MHz is optional), average power covered from 40W to >75W. Advanced Optowave lasers are designed and engineered with flexible laser architectures. Please contact Advanced Optowave for any laser requirements exceeding standard specifications.



AW2-HP SERIES High Power GR Industrial Lasers

| SPECIFICATIONS* | AW2-HP-40W-50K | AW2-HP-50W-50K | AW2-HP-75W-50K |
|---------------------------------------|-----------------------------|----------------|----------------|
| Wavelength | 532 nm | | |
| Average Power ¹ | 40W | 50W | 75W |
| Pulse Repetition Rate | Single Shot to 300 kHz | | |
| Beam Quality (M ²) | <1.2 | | |
| Spatial Mode ² | TEM00 | | |
| Beam Roundness | >90% | | |
| Pulse Width ³ | <35ns @ 50K <45ns @ 100K | | |
| Pulse-to-Pulse Stability ⁴ | <2% RMS | | |
| Average Power Stability ⁴ | <3% over 12 hours | | |
| Point Stability | 20 μrad/°C | | |
| Polarization Ratio | >100:1 LINEAR, VERTICAL | | |
| Communication Protocol ⁵ | RS-232 | | |
| Operating Voltage (VAC) | 90-260 | | |
| Line Frequency (Hz) | 47-63 | | |
| Cooling | WATER | | |
| Operation Temperature | 15° - 30° C | | |
| Operation Humidity | 20% - 80% | | |
| Storage Temperature | -10° - 50° C | | |

| DIMENSIONS & WEIGHT | DIMENSIONS (IN.) | WEIGHT (LBS.) |
|---------------------|--------------------------------------|---------------|
| Laser Head | 13.75 x 8 x 3.75 | 25 |
| Laser Controller | 19 x 17 x 7 | 30 |
| Umbilical | 100 inches / 2.5 meters (all lasers) | |

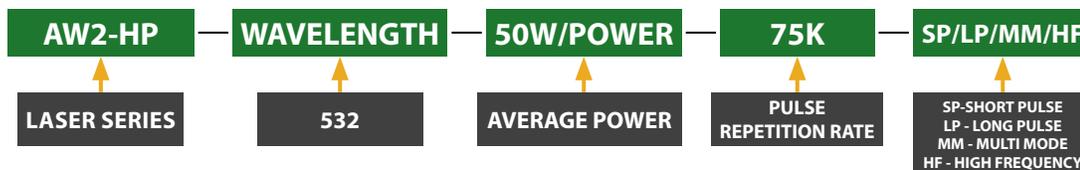
Note:

- Contact AOC for higher power lasers.
- Contact AOC for multimode option.
- Contact AOC for short pulse or long pulse width option.
- Defined as standard deviation/average.
- Contact AOC for USB II & Ethernet.

COMPLIANCE: CDRH, ROHS, CE

Order Information

Our lasers are designed and engineered with flexible laser architectures. Customers can specify laser requirements based on their needs. Please contact us for any laser requirements exceeding the specifications of standard products.



*Advanced Optowave Corporation follows a policy of continuous product improvement. Specifications are subject to change without notice. Advanced Optowave Corporation offers a limited warranty for all laser systems. For full details on warranty coverage, or for further product information, please contact us.