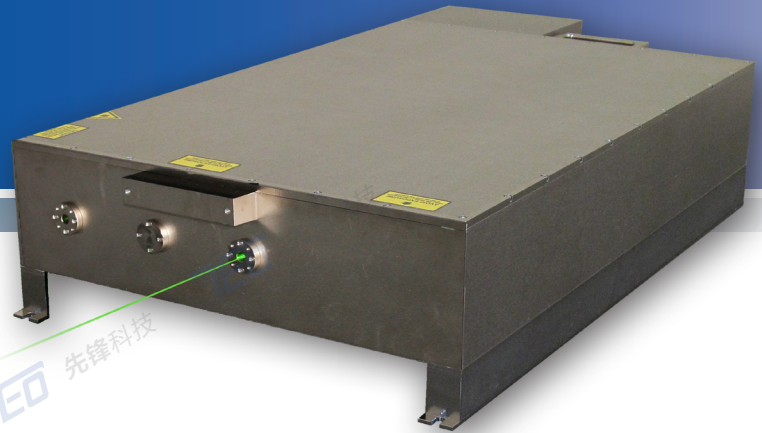


ALTA SERIES

Picosecond Industrial Lasers

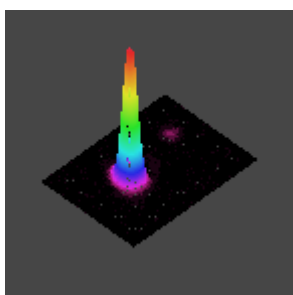
applications.

Polymer Processing/Machining
High-Speed Precision Micromachining
Semiconductor/PV Processing/Wafer Scribing
Sapphire Scribing, Drilling & Dicing
Microfluidics
Pulsed Laser Deposition
Injector Nozzle Drilling
Thin-Film, Solar Cell Structuring
Glass Welding, Sub-Surface Marking & Micromachining
Metal Processing
Ceramic Micro-Processing
Micro-Via Drilling
Medical Device Manufacturing

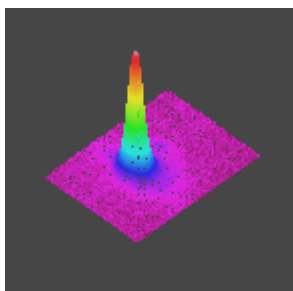


features & benefits.

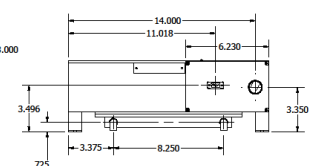
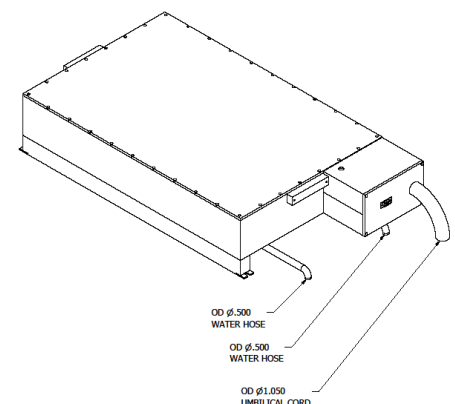
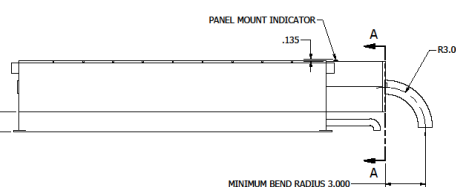
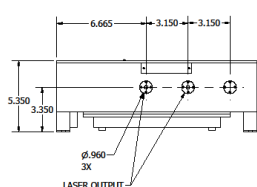
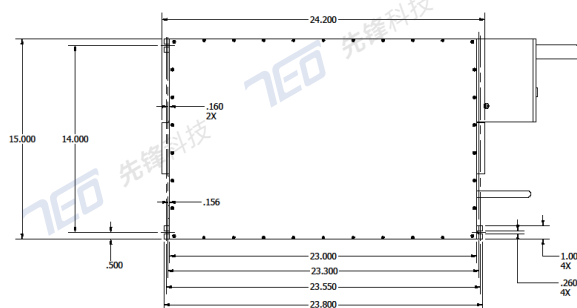
Available in IR, GR & UV Wavelengths
Up to 10W Average Power*
Excellent Beam Quality of $M^2 < 1.3^*$
Highly Reliable Design
Simple, Intuitive Control Features
Pulse Durations of ~ 8 ps
Flexible Output Options
Burst Mode Option
Lowest Cost of Ownership in the Industry



532 BEAM PROFILE*



1064 BEAM PROFILE*



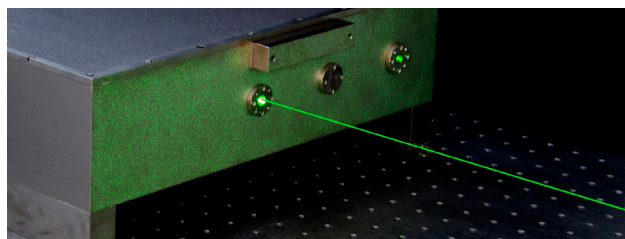
ALTA SERIES

Picosecond Industrial Lasers

| SPECIFICATIONS* | ALTA-PS-1064-10W | ALTA-PS-532-5W | ALTA-PS-355-3W |
|---------------------------------------|---------------------------|-------------------------|---------------------------|
| Wavelength ¹ | 1064 nm | 532 nm | 355 nm |
| Average Power ² | 10W | 5W | 3W |
| Pulse Repetition Rate ³ | | 100-1000 kHz | |
| Beam Quality (M ²) | | <1.3 | |
| Spatial Mode | | TEM00 | |
| Beam Roundness | | >85% | |
| Pulse Width (ps) | | 7 ± 2 | |
| Pulse Energy (µJ @ 100kHz) | >40 | >30 | >20 |
| Pulse-to-Pulse Stability ⁴ | <2% RMS | <2% RMS | <3% RMS |
| Average Power Stability ⁴ | <1% over 12 hours | <2% over 12 hours | <2% over 12 hours |
| Point Stability | | 20 µrad/°C | |
| Polarization Ratio | >100:1 LINEAR, HORIZONTAL | >100:1 LINEAR, VERTICAL | >100:1 LINEAR, HORIZONTAL |
| Communication Protocol ⁵ | | RS-232 | |
| Operating Voltage (VAC) | | 90-260 | |
| Line Frequency (Hz) | | 50-60 | |
| Cooling | | CLOSED-LOOP WATER | |
| Operation Temperature | | 15° - 30° C | |
| Operation Humidity | | 20% - 80% | |
| Storage Temperature | | -20° - 50° C | |

Dimensions & Weight

| | DIMENSIONS (IN.) | WEIGHT (LBS.) |
|------------------|--------------------------------------|---------------|
| Laser Head | 23 x 15 x 7 | 70 |
| Laser Controller | 14.5 x 19 x 7 | 20 |
| Umbilical | 100 inches / 2.5 meters (all lasers) | |



Note:

1. Contact AOC for 266 nm wavelength.
2. Contact AOC for higher power lasers.
3. Contact AOC for high frequency.
4. Defined as standard deviation/average.
5. Contact AOC for USB II & Ethernet.

COMPLIANCE: CDRH, ROHS, CE

*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 Picosecond IR/GR/UV laser systems. For full details on warranty coverage, or for further product information, please contact us.

