# UAW101S Amplifier

## TECHNOLOGY SUMMARY

The Unilase laser amplifier is a high performance, compact unit capable of delivering tens of watts of output power from low power seed lasers.

The mini-slab DPSS design and scalable architecture offers extremely high gain and high average power output with excellent beam quality.

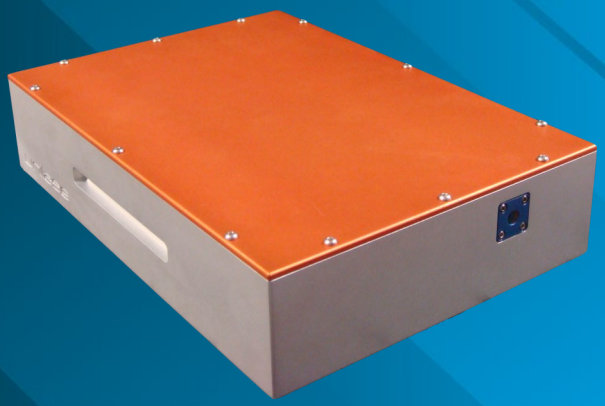
A Unilase amplifier in combination with a pulsed seed laser assures efficient conversion of the amplified beam into green and the UV if required.

## BENEFITS

- Amplification of CW and Pulsed (ps-ns) seed lasers
- High gain ($10^4$-$10^5$)
- High Peak power handling capability
- High polarization purity
- Scalable architecture

## FEATURES

- Compact Footprint
- Robust Mechanical Design
- Integrated thermal management



## APPLICATIONS

- Test and Measurement
- Higher Throughput Production
- Scientific Research
- LIDAR

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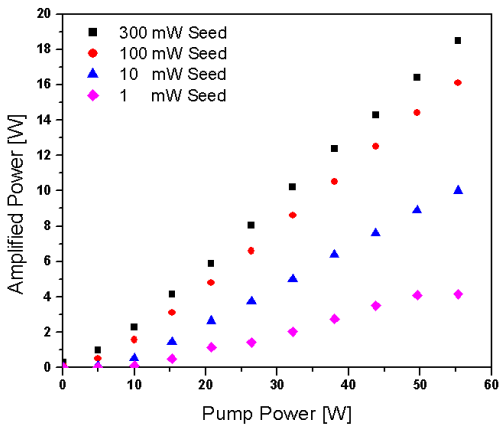
# Performance Figures

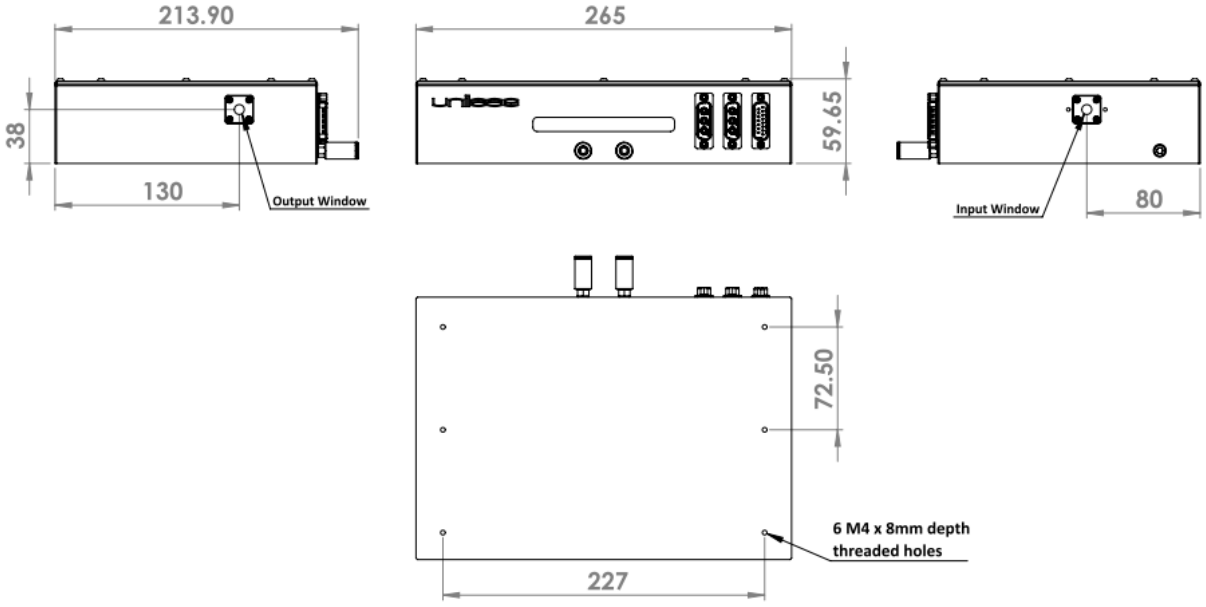
## CW AMPLIFICATION




| Parameter | Value |
|---|---|
| Material | $Nd:YVO_4$ |
| Wavelength | 1064.2 nm |
| Average Input Seed Power | Amplified Power |
| 300 mW | > 18W |
| 100 mW | > 15W |
| 1.0 mW | > 4W |
| Spatial Quality | $TEM_{00}$, $M^2$<1.2 |
| Polarisation | > 100:1 (vertical:horizontal) |
| Cooling Method | Water |
| Operating Temperature Range | 15-35 DegC |

**Typical values for CW $Nd:YVO_4$ seed laser**

## DIMENSIONS




**all dimensions are in mm**

**Optional Accessories:**

1. The amplifier can be supplied with an electronic controller (19" rack, 2U high) to provide currents for diode pump module and thermal management of the unit.
2. Unilase can supply a suitable re-circulating chiller for heat extraction.
3. Air-cooled version of the amplifier can be supplied on request.

**Unilase has a policy of continuous product improvements. Specifications are subject to change without notice.**



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