

AOPico Montauk Series

Industrial IR picosecond laser

- < Maximum pulse energy up to 3mJ
- < POD function available
- < 1 ~ 10 pulses burst mode available
- < Excellent beam quality ($M^2 < 1.3$)
- < Laser output power can be controlled through external analog voltage signal
- < Real-time laser status monitoring and intelligent diagnosis



► Features & Benefits:

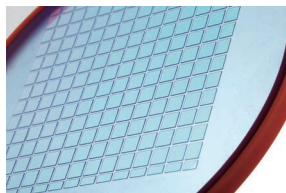
AOPico Montauk IR picosecond lasers feature excellent beam quality ($M^2 < 1.3$) with beam roundness is up to 90%. The pulse stability and power stability of the laser are excellent. The output power of the laser ranges from 30W to 100W.

The lasers can be controlled via external gate/trigger signals. Both high/low level gate and rising/falling edge trigger are available. The rising/falling edge trigger mode enables Pulse-on-demand (POD) functionality. In addition, the output power of the laser can be controlled through external analog voltage signal. The lasers also have the functions of automatic crystal indexing function, power display, laser status real-time monitoring, and intelligent diagnosis. Through the use of various internal sensors, the laser status is completely monitored, which enables remote troubleshooting and recovery. The user experience is greatly improved as the laser is user-friendly.

With these advantages, AOPico Mantauk picosecond IR lasers are the best choice for the applications of cutting various transparent brittle materials such as glass, sapphire, and full-screen displays. It not only cuts a wide range of thicknesses with good quality (virtually no dust, no burrs, debris, microcracks), but also allows for cutting of almost any shape with minimal taper (straight lines, curves, circular holes, etc.).



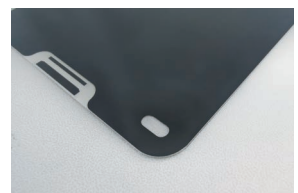
Sapphire cutting



Glass cutting



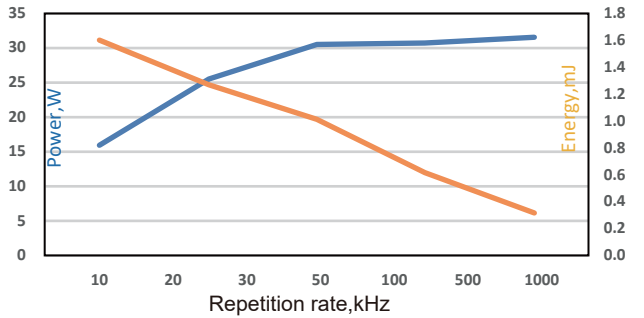
Metal etching



Full-screen cutting

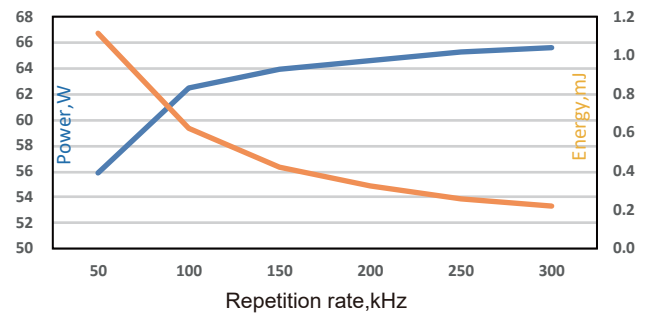
Typical Performance AMT-1064-30W

Power and Energy as a Function of Repetition Rate



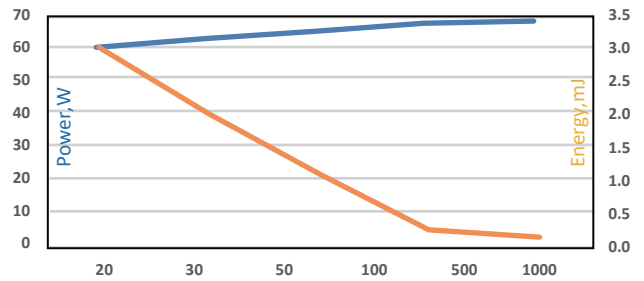
Typical Performance AMT-1064-50W

Power and Energy as a Function of Repetition Rate



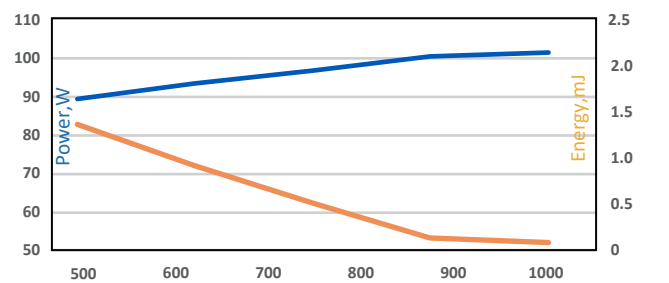
Typical Performance AMT-1064-70W

Power and Energy as a Function of Repetition Rate



Typical Performance AMT-1064-100W

Power and Energy as a Function of Repetition Rate

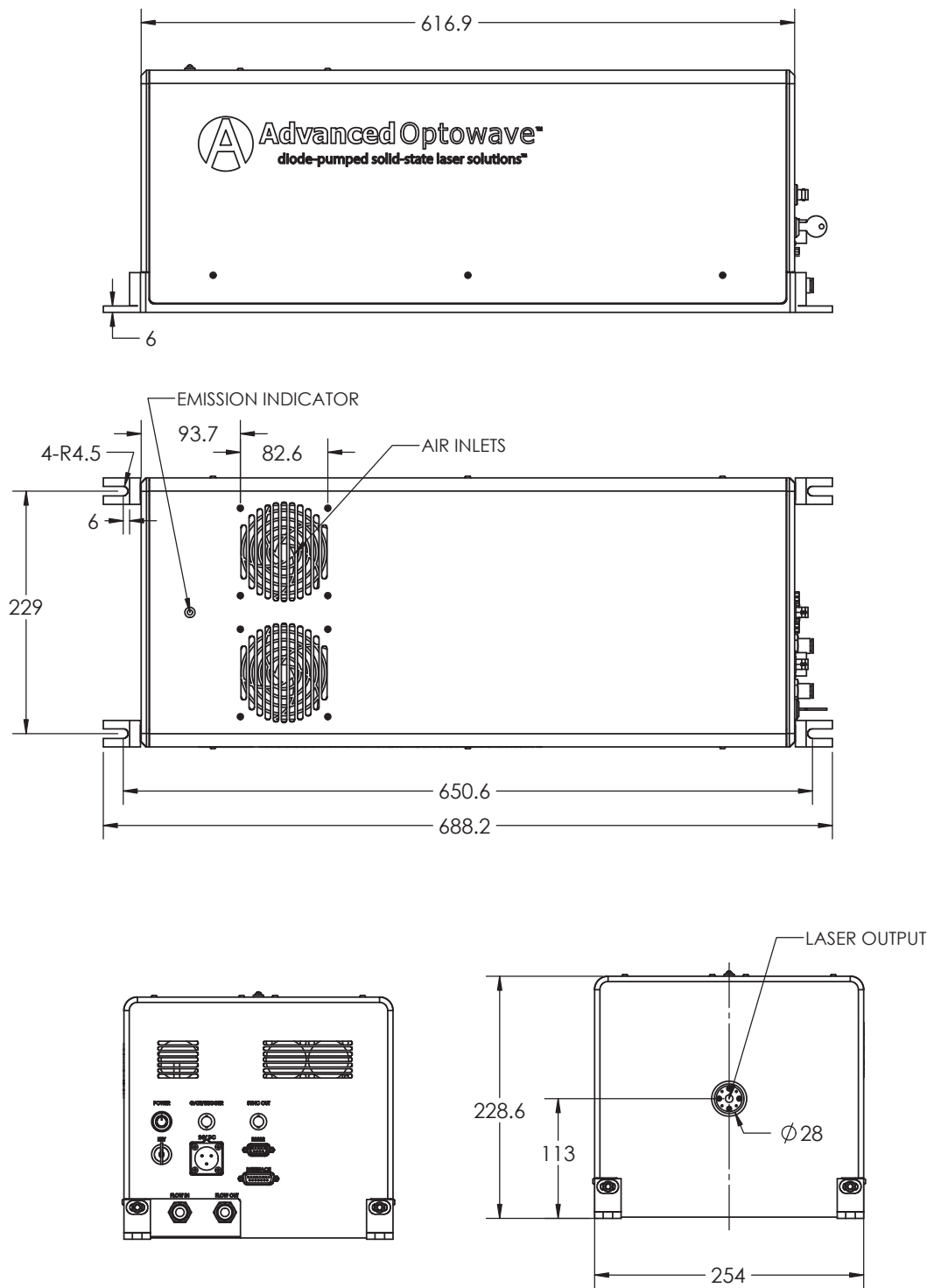


AOPico Montauk 1064

| Specification | 30W-100K | 50W-50K | 70W-20K | 100W-1000K |
|---|--------------------------|------------|------------|-------------|
| Wavelength (nm) | 1064 | | | |
| Average Power (Watts) | > 30 | > 50 | > 70 | > 100 |
| Energy (μJ) | 300@100KHz | 1000@50KHz | 3500@20KHz | 100@1000KHz |
| Specified Repetition Rate(kHz) | 100 | 50 | 20 | 1000 |
| Repetition Rate (kHz) | 100~1000 | 50~300 | 20~100 | 500~1000 |
| Pulse Width (ps) | < 15 | | | |
| Beam Quality (M ²) | < 1.3 | < 1.3 | < 1.3 | < 1.3 |
| Beam Roundness (%) | > 90 | | | |
| Beam Diameter (mm) | < 3 | | | |
| Beam Divergence (mRad) | < 2 | | | |
| Point Stability (μrad/°C) | < 20 | | | |
| Polarization Ratio | 100:1 Linear, Horizontal | | | |
| Pulse-to-Pulse Stability (% RMS) | < 2 | | | |
| Average Power Stability(% over12 hours) | < 3 | | | |
| Cold Start Warm-Up (mins.) | < 40 | | | |
| Standby Warm-Up (mins.) | < 10 | | | |
| Operational Temperature Range (°C) | 15-35°C | | | |
| Operation Humidity Range (%) | 20 to 80,Non-condensing | | | |
| Storage Temperature Range (°C) | - 20 to 50 | | | |
| Storage Humidity Range (%) | 20 to 80,Non-condensing | | | |
| Input Voltage (VDC)/Rated Power(W) | 24/1000 | | | 36/1600 |
| Communication | RS232 | | | |
| Cooling | Water | | | |

AOPico Montauk SERIES

AOPico Montauk 1064 -30W Laser CAD Drawing



AOPico Montauk 1064 -50W、 60W、 70W Laser CAD Drawing

