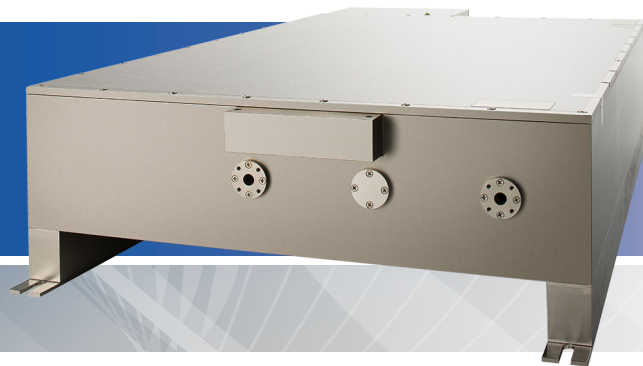


AOPico™ Series

Industrial Picosecond Lasers



Features & Benefits

Lowest Cost of Ownership in the Industry
 Excellent Beam Quality of $M^2 < 1.3$
 Available in IR, Green and UV
 Up to 45W Average Power
 Pulse Durations of 7 ps
 Highly Reliable Design
 Burst Mode Option

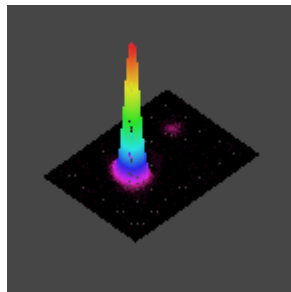
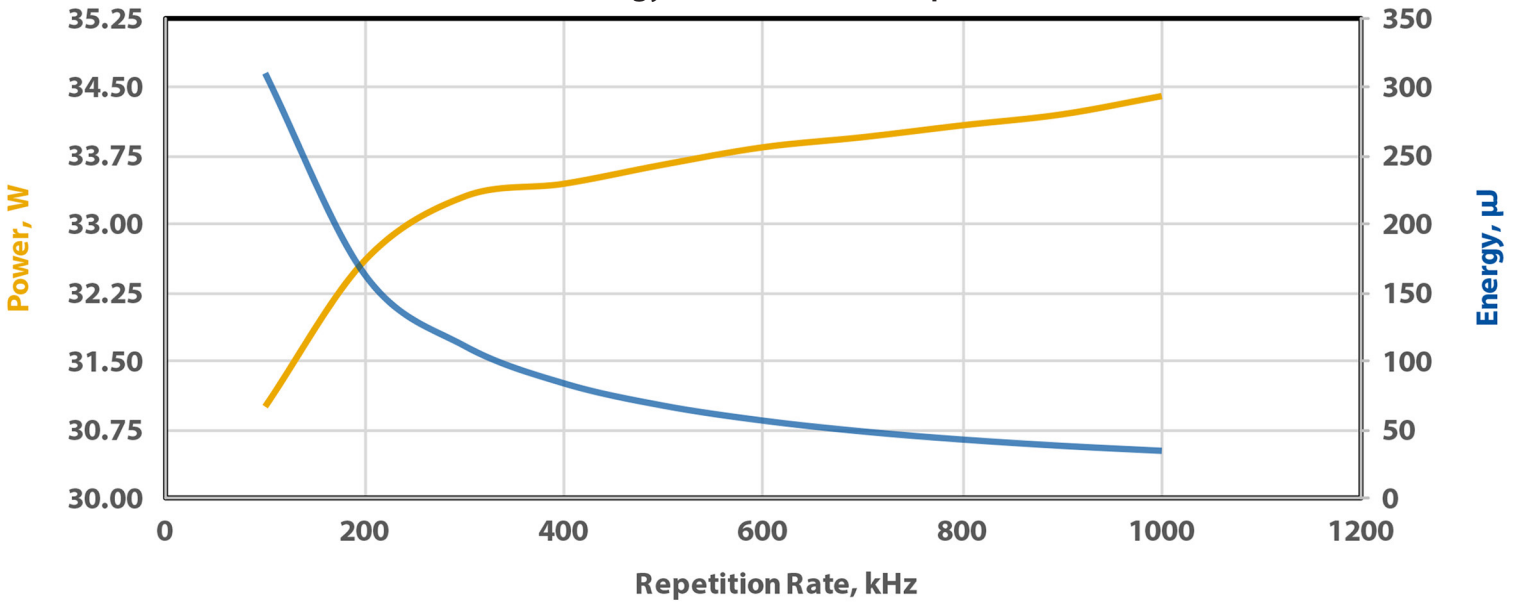
Applications

Thin-Film Ablation
 Medical Device Manufacturing
 Polymer Processing/Machining
 Semiconductor/PV Processing/Wafer Scribing
 High-Precision, High-Speed Micro-machining
 Brittle Material Cutting, Drilling, Dicing & Sub-Surface Marking

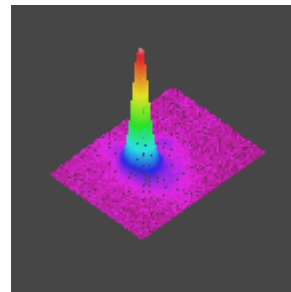
SPECIFICATIONS*	AOPico 1064			AOPico 532			AOPico 355		
	10-100	25-200	45-1000	5-100	12-200	20-1000	3-100	6-200	10-1000
Wavelength (nm)	1064	1064	1064	532	532	532	355	355	355
Average Power (Watts)	10	25	45	5	12	20	3	6	10
Energy (μJ)	100	125	45	50	60	20	30	30	10
Specified Repetition Rate (kHz)	100	200	1000	100	200	1000	100	200	1000
Repetition Rate (kHz)	Single Shot to 1000								
Pulse Width (ps)	7 ± 2								
Beam Quality (M ²)	<1.3								
Beam Roundness (%)	>85								
Beam Diameter (mm)	~1.0			~0.6			~0.5		
Beam Divergence (mRad)	<1.3			<0.7			<0.35		
Point Stability (μrad/°C)	<50								
Polarization Ratio	100:1 Linear, Horizontal			100:1 Linear, Vertical			100:1 Linear, Horizontal		
Pulse-to-Pulse Stability (% RMS)	<2								
Average Power Stability (% over 12 hours)	<3								
Cold Start Warm-Up (mins.)	<30								
Standby Warm-Up (mins.)	<20								
Operational Temperature Range (°C)	15 to 30								
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 (VAC)	90 to 260								
Line Frequency (Hz)	50 or 60								
Communication	RS-232								
Cooling	Water								

AOPico™ Series
Industrial Picosecond Lasers

Typical Performance AOPico 1064-25-200
 Power and Energy as a Function of Repetition Rate



532 BEAM PROFILE*



1064 BEAM PROFILE*

Dimensions & Weight

DIMENSIONS	DIMENSIONS, in (mm)	WEIGHT, lbs (kg)
Laser Head	25 x 15 x 7 (585 x 381 x 179)	70 (32)
Laser Controller	19 x 17 x 7 (482 x 432 x 178)	30 (13.6)
Umbilical	100 (2.5)	

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

