

AOFemto™ Series

Industrial Femtosecond 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 15W Average Power
Pulse Durations of < 800 fs
Highly Reliable Design
Burst Mode Option

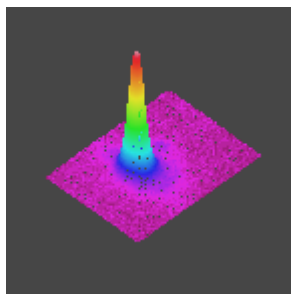
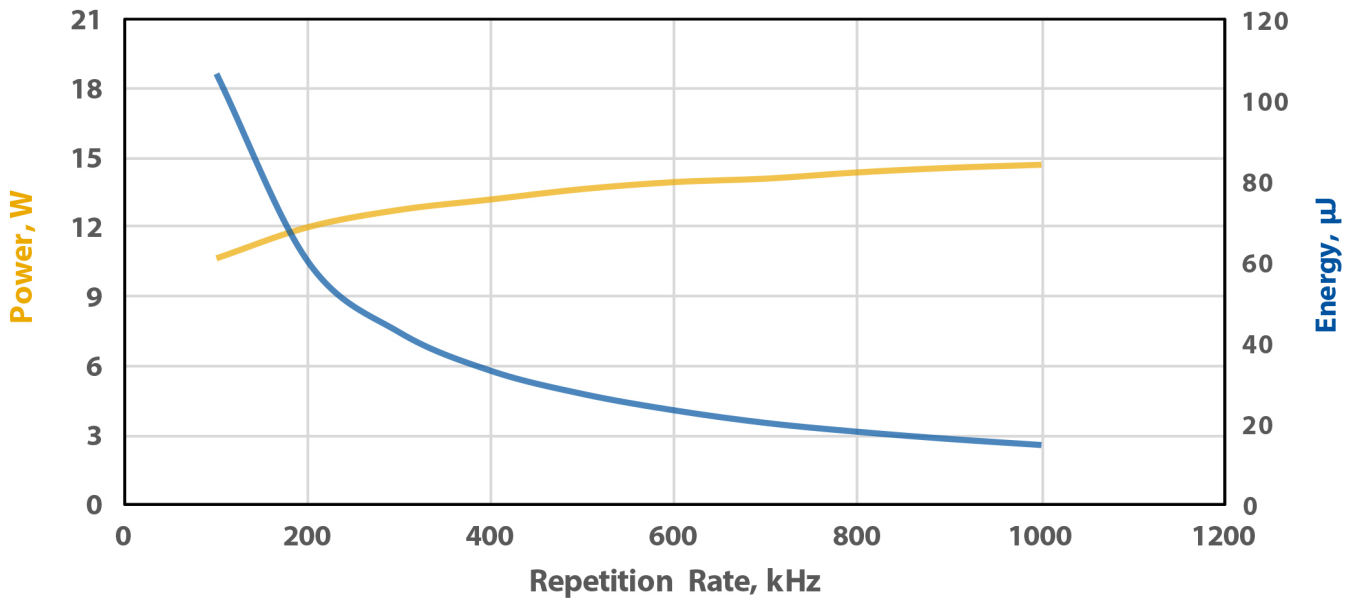
Applications

Injector Drilling
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

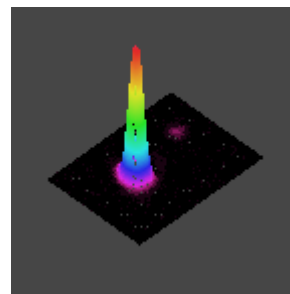
SPECIFICATIONS*	AOFemto 1030			AOFemto 515		
	2-100	10-100	20-200	1-100	5-100	10-200
Wavelength (nm)	1030			515		
Average Power (Watts)	2	10	20	1	5	10
Energy (μJ)	20	100	100	10	50	50
Specified Repetition Rate (kHz)	100	100	200	100	100	200
Repetition Rate (kHz)	Single Shot to 1000					
Pulse Width (fs)	<800					
Beam Quality (M^2)	<1.3					
Beam Roundness (%)	>85					
Beam Diameter (mm)	2.0					
Beam Divergence (mRad)	<1.3			<0.7		
Point Stability (μrad/°C)	<20					
Polarization Ratio	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					

AOFemto Series
 Industrial Picosecond Lasers

Typical Performance AOFemto 1030-10-100
 Power and Energy as a Function of Repetition Rate



1030 BEAM PROFILE*



515 BEAM PROFILE*

Dimensions & Weight

DIMENSIONS	DIMENSIONS, in (mm)	WEIGHT, lbs (kg)
Laser Head	27 x 15 x 7 (686 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.

