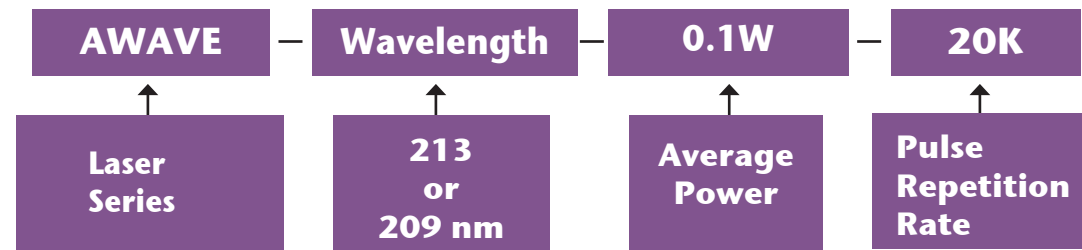


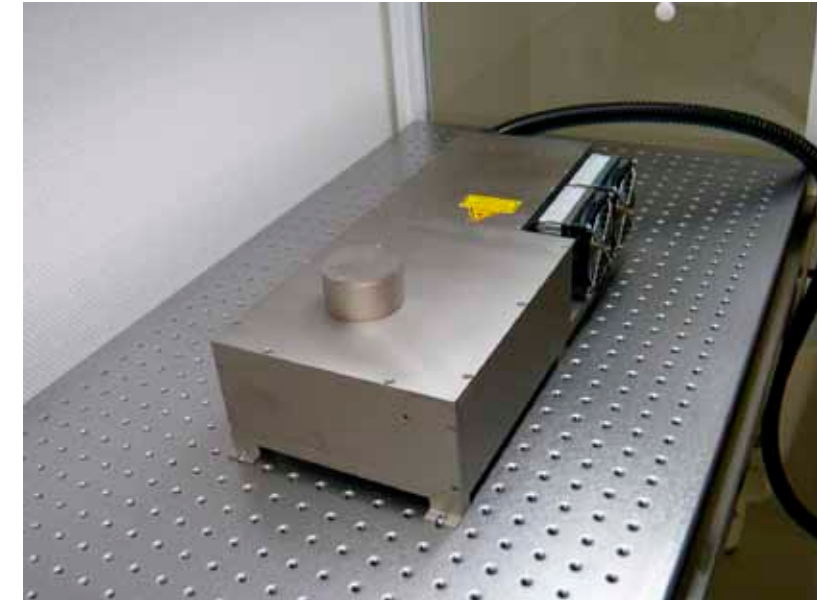
Order Information

Optowave lasers are designed and engineered with flexible laser architectures. Customers can specify laser requirements based on their needs. Please contact Optowave for any laser requirements exceeding the specifications of standard products.



Reliable DPSS Lasers

AWAVE EUV Series



Awave EUV series, are Q-switched TEM00 mode lasers and engineered for the highly demanding 24/7 production environment, consisting of a laser head and a laser controller connected with a 2.5 meter umbilical cable. The fiber-coupled pumping diodes are located in the laser controller for easy field-replacement. The laser head is sealed in a clean room to assure long term reliability.

Awave EUV Series lasers are featured with pulse frequencies ranging from 1-100 kHz, average power covered from 10 mW to 100mW and pulse energy in excess of 0.1 mJ, 100mW/EUV laser. Optowave lasers are designed and engineered with flexible laser architectures. Please contact Optowave for any laser requirements exceeding standard specifications.

Advantages

- Patent pending harmonic conversion technologies
- 24/7 proven reliability
- Excellent beam quality, pulse stability, and point stability
- Low operational cost
- Field-replaceable diode
- Ultra-compact and low weight

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 Awave Series laser systems. For full details on warranty coverage, or for further product information, please contact Advanced Optowave Corporation.

ND:YLF EUV Laser Systems

Parameters	Laser Models	
	AWAVE-209 50mW-1K	AWAVE-209 100mW-1K
Wavelength (nm)	209	
Average Power ¹⁾ (mW)	50mW	100mW
Pulse Repetition Rate	Single Shot to 15 kHz	
M ²	<1.3	
Spatial Mode ²⁾	TEM00	
Pulse Width (ns)	<25ns @1K <50ns @10K	<40ns @1K <50ns @10K
Pulse Energy (mJ)@1kHz	>50uJ	>100uJ
Pulse-Pulse Stability ²⁾	<3%RMS	
Average Power Stability ²⁾	<3% over 12 hours	
Polarization Direction	Horizontal	
Polarization Ratio	>100:1	
Operating Voltage (VAC)	90-260	
Line Frequency (Hz)	47-63	
Cooling	Air	Water
Ambient Temperature (°C)	15-30	
Storage Temperature (°C)	-10~50	

*Note: 1) Contact AOC for higher power laser 2) Defined as standard deviation/average

ND:YAG EUV Laser Systems

Parameters	Laser Models	
	AWAVE-213 50mW-3K	AWAVE-213 100mW-3K
Wavelength (nm)	213	
Average Power ¹⁾ (mW)	50mW	100mW
Pulse Repetition Rate	Single Shot to 20 kHz	
M ²	<1.3	
Spatial Mode	TEM00	
Pulse Width (ns)	<20ns @1K <40ns @10K	<30ns @1K <60ns @10K
Pulse Energy (uJ)@2kHz	>20uJ	>40uJ
Pulse-Pulse Stability ²⁾	<3%RMS	
Average Power Stability ²⁾	<3% over 12 hours	
Polarization Direction	Horizontal	
Polarization Ratio	>100:1	
Operating Voltage (VAC)	90-260	
Line Frequency (Hz)	47-63	
Cooling	Air	Water
Ambient Temperature (°C)	15-30	
Storage Temperature (°C)	-10~50	

*Note: 1) Contact AOC for higher power laser 2) Defined as standard deviation/average

ND:YVO4 EUV Laser Systems

Parameters	Laser Models	
	AWAVE-213 50mW-20K	AWAVE-213 100mW-20K
Wavelength (nm)	213	
Average Power ¹⁾ (mW)	50mW	100mW
Pulse Repetition Rate	Single Shot to 100 kHz	
M ²	<1.2	
Spatial Mode ²⁾	TEM00	
Pulse Width (ns)	<10ns @20K <40ns @100K	
Pulse Energy (uJ)@20kHz	>2.5uJ	>5uJ
Pulse-Pulse Stability ²⁾	<3%RMS	
Average Power Stability ²⁾	<3% over 12 hours	
Polarization Direction	Horizontal	
Polarization Ratio	>100:1	
Operating Voltage (VAC)	90-260	
Line Frequency (Hz)	47-63	
Cooling	Air	Water
Ambient Temperature (°C)	15-30	
Storage Temperature (°C)	-10~50	

*Note: 1) Contact AOC for higher power laser 2) Defined as standard deviation/average

Dimensions and Weight

Laser Types		AW1-HP
Diminension In. (LxWxH)	Laser Head	23.8x8x5.5
	Laser Controller	19x17x7
Weight Lbs.	Laser Head	30
	Laser Controller	20
Umbilical Cable Length		100 inches/2.5 meters