

High Power DUV Lasers

AW4-HP Series



AW4-HP Series lasers are high power (>5W) Q-switched, TEM00 mode 266 nm lasers which are 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.

AW4-HP Series lasers are featured with pulse frequencies ranging from 1-300 kHz (300 kHz to 500 kHz is optional), average power covered from 5W to ~10W. 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

Laser Standard Specifications

Parameters	Laser Models		
	AW4-HP 5W-30K	AW4-HP 7W-30K	AW4-HP 10W-30K
Wavelength (nm)	266		
Average Power	5W	7W	10W
Pulse Repetition Rate	Single Shot to 300 kHz		
M ²	<1.2		
Spatial Mode	TEM00		
Pulse Width (ns) ¹⁾	<15ns @20K <30ns @100K		
Pulse-Pulse Stability ²⁾	<2%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	Water	Water	Water
Ambient Temperature (°C)	15-30		
Storage Temperature (°C)	-10~50		

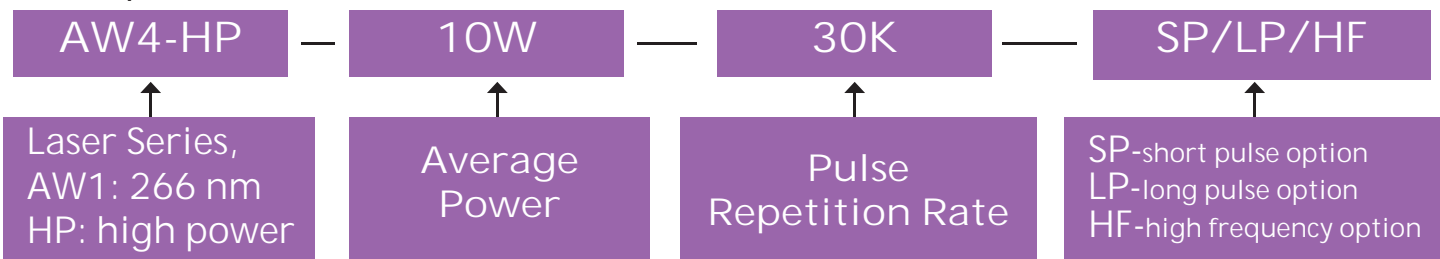
*Note: 1) Contact AOC for short pulse or long pulse width option 2) Defined as standard deviation/average

Dimensions and Weight

Laser Types		AW3-HP
Dimension In. (LxWxH)	Laser Head	24x8x3.75
	Laser Controller	19x17x7
Weight Lbs.	Laser Head	25
	Laser Controller	30
Umbilical Cable Length		100 inches/2.5 meters

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.



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