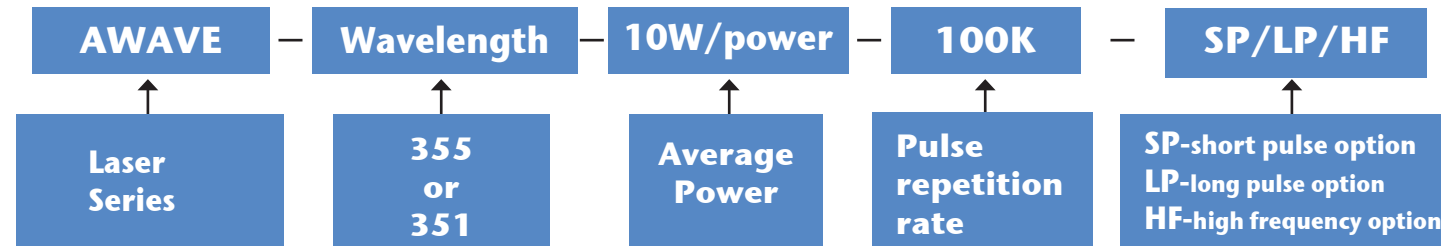


## Dimensions and Weight

Laser Types		Compact	Medium	Large
<b>Dimension In. (LxWxH)</b>	Laser Head	8x5x3.45	9x8x3.75	13.75x8x3.75
	Laser Controller	15x15x5	19x17x7	19x17x7
<b>Weight Lbs.</b>	Laser Head	4.5	6	20
	Laser Controller	12	15	20
<b>Umbilical Cable Length</b>		<b>100 inches/2.5 meters</b>		

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

## Reliable DPSS Lasers

### AWAVE UV Series



Awave UV/355 nm 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 UV Series lasers are featured with pulse frequencies ranging from 1-300 kHz (up to 500 kHz is optional), average power covered from 100 mW to 15W and pulse energy in excess of 4 mJ. For over 20W UV lasers, please refer to the AW-HP Series. 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
- Air-Cooling (Average power Up to 6W)

## ND:YLF UV Laser Systems

Parameters	Laser Models				
	AWAVE-351 0.5W-3K	AWAVE-351 1W-3K	AWAVE-351 2W-3K	AWAVE-351 3W-3K	AWAVE-351 6W-3K
Wavelength (nm)	351				
Average Power <sup>1)</sup>	0.5W	1W	2W	3W	6W
Pulse Repetition Rate	Single Shot to 20 kHz				
M <sup>2</sup>	<1.2				
Spatial Mode	TEM00				
Beam Roundness	>90%				
Pulse Width (ns) <sup>1)</sup>	<40ns @1K <70ns @10K	<30ns @1K <70ns @10K	<30ns @1K <70ns @10K	<30ns @1K <60ns @10K	<30ns @1K <60ns @10K
Pulse Energy (mJ)@1kHz	>0.2mJ	>0.4mJ	>0.8mJ	>1.2mJ	>3mJ
Pulse-Pulse Stability <sup>2)</sup>	<2%RMS				
Average Power Stability <sup>2)</sup>	<3% over 12 hours				
Polarization Direction	Horizontal				
Polarization Ratio	>100:1				
Operating Voltage (VAC)	90-260				
Line Frequency (Hz)	47-63				
Cooling	Air	Air	Air	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 UV Laser Systems

Parameters	Laser Models				
	AWAVE-355 0.5W-6K	AWAVE-355 1W-6K	AWAVE-355 2W-6K	AWAVE-355 4W-10K	AWAVE-355 8W-10K
Wavelength (nm)	355				
Average Power <sup>1)</sup> (W)	0.5W	1W	2W	4W	8W
Pulse Repetition Rate	Single Shot to 50 kHz				
M <sup>2</sup>	<1.2				
Spatial Mode	TEM00				
Beam Roundness	>90%				
Pulse Width (ns)	<20ns @1K <40ns @10K	<30ns @1K <70ns @10K	<30ns @1K <70ns @10K	<30ns @1K <60ns @10K	<30ns @1K <60ns @10K
Pulse Energy (mJ)@2kHz	>0.1mJ	>0.3mJ	>0.5mJ	>0.8mJ	>1.5mJ
Pulse-Pulse Stability <sup>2)</sup>	<2%RMS				
Average Power Stability <sup>2)</sup>	<3% over 12 hours				
Polarization Direction	Horizontal				
Polarization Ratio	>100:1				
Operating Voltage (VAC)	90-260				
Line Frequency (Hz)	47-63				
Cooling	Air	Air	Air	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:YV04 UV Laser Systems

Parameters	Laser Models			
	AWAVE-355 0.5W-20K	AWAVE-355 1.5W-20K	AWAVE-355 4W-30K	AWAVE-355 6W-30K
Wavelength (nm)	355			
Average Power <sup>1)</sup> (W)	0.5W	1.5W	4W	6W
Pulse Repetition Rate	Single Shot to 300 kHz			
M <sup>2</sup>	<1.2			
Spatial Mode	TEM00			
Beam Roundness	>90%			
Pulse Width (ns) <sup>1)</sup>	<15ns @20K <35ns @100K	<20ns @20K <45ns @100K	<15ns @20K <30ns @100K	<15ns @20K <50ns @100K
Pulse Energy (uJ)@20kHz	>25uJ	>75uJ	>100uJ	>250uJ
Pulse-Pulse Stability <sup>2)</sup>	<2%RMS			
Average Power Stability <sup>2)</sup>	<3% over 12 hours			
Polarization Direction	Horizontal			
Polarization Ratio	>100:1			
Operating Voltage (VAC)	90-260			
Line Frequency (Hz)	47-63			
Cooling	Air	Air	Air	Air
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:YV04 UV Laser Systems

Parameters	Laser Models			
	AWAVE-355 0.8W-30K	AWAVE-355 10W-30K	AWAVE-355 12W-30K	AWAVE-355 15W-30K
Wavelength (nm)	355			
Average Power <sup>1)</sup> (W)	8W	10W	12W	15W
Pulse Repetition Rate	Single Shot to 300 kHz			
M <sup>2</sup>	<1.2			
Spatial Mode	TEM00			
Beam Roundness	>90%			
Pulse Width (ns) <sup>1)</sup>	<15ns @20K <35ns @100K	<15ns @20K <50ns @100K	<15ns @20K <50ns @100K	<15ns @20K <50ns @100K
Pulse Energy (uJ)@20kHz	>400uJ	>450uJ	>450uJ	>450uJ
Pulse-Pulse Stability <sup>2)</sup>	<2%RMS			
Average Power Stability <sup>2)</sup>	<3% over 12 hours			
Polarization Direction	Horizontal			
Polarization Ratio	>100:1			
Operating Voltage (VAC)	90-260			
Line Frequency (Hz)	47-63			
Cooling	Air/Water	Water	Water	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