Advanced Optowave

impact through innovation.

PRODUCT DATA SHEET
NANO-DUV-263/266

AWAVE SERIES
Industrial Lasers

features & benefits.

Innovative End-Pumping Technology
Air-Cooling (Average Power Up to 6W)
Excellent Beam Quality, Pulse Stability & Point Stability
Patent Pending Harmonic Conversion Technologies
Ultra-Compact & Light-Weight
Brand-New Focusing Optics
Field-Replaceable Diode
24/7 Proven Reliability
Low Operational Cost

AWAVE DUV Series models are Q-switched TEM00 mode lasers and are engineered for the highly demanding 24/7 production environment. Each system consists 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 DUV Series lasers are featured with pulse frequencies ranging from 1-200 kHz, average power covered from 10mW to 3W and pulse energy in excess of 3mJ. For a DUV laser over 3W, please refer to the AW-HP Series. Our AWAVE UV lasers are designed and engineered with flexible laser architectures. Contact Advanced Optowave for any laser requirements exceeding standard specifications.

ND:YLF DUV Laser Systems

SPECIFICATIONS*	AWAVE 263-0.5W-3K	AWAVE 263-1W-3K	AWAVE 263-1.5W-3K	AWAVE 263-2W-3K	AWAVE 263-3W-3K
Wavelength[1]	263 nm				
Average Power[2]	0.5W	1W	1.5W	2W	3W
Pulse Repetition Rate[3]	Single Shot to 15 kHz				
Beam Quality (M^2)	<1.2				
Spatial Mode	TEM00				
Beam Roundness	>90%				
Pulse Width (ns)	<30ns @1kHz <50ns @10kHz	<25ns @1kHz <50ns @10kHz	<25ns @1kHz <50ns @10kHz	<40ns @1kHz <50ns @10kHz	<40ns @1kHz <50ns @10kHz
Pulse Energy (mJ @ 1kHz)	>0.1mJ	>0.4mJ	>0.6mJ	>0.8mJ	>1.2mJ
Pulse-to-Pulse Stability[4]	<2% RMS				
Average Power Stability[4]	<3% over 12 hours				
Polarization Ratio	>100:1 LINEAR, HORIZONTAL				
Communication Protocol[5]	RS-232				
Operating Voltage (VAC)	90-260				
Line Frequency (Hz)	47-63				
Cooling	AIR	AIR	AIR	WATER	WATER
Operation Temperature	15° - 30° C				
Operation Humidity	20% - 80%				
Storage Temperature	-20° - 50° C				

ND:YAG DUV Laser Systems

SPECIFICATIONS*	AWAVE 266-0.5W-6K	AWAVE 266-1W-6K	AWAVE 266-1.5W-6K	AWAVE 266-2W-6K	AWAVE 266-3W-6K
Wavelength[1]	266 nm				
Average Power[2]	0.5W	1W	1.5W	2W	3W
Pulse Repetition Rate[3]	Single Shot to 50 kHz				
Beam Quality (M^2)	<1.2				
Spatial Mode	TEM00				
Beam Roundness	>90%				
Pulse Width (ns)	<15ns @1kHz <30ns @10kHz	<20ns @1kHz <40ns @10kHz	<20ns @1kHz <40ns @10kHz	<30ns @1kHz <60ns @10kHz	<30ns @1kHz <60ns @10kHz
Pulse Energy (mJ @ 1kHz)	>0.1mJ	>0.2mJ	>0.3mJ	>0.4mJ	>0.6mJ
Pulse-to-Pulse Stability[4]	<2% RMS				
Average Power Stability[4]	<3% over 12 hours				
Polarization Ratio	>100:1 LINEAR, HORIZONTAL				
Communication Protocol[5]	RS-232				
Operating Voltage (VAC)	90-260				
Line Frequency (Hz)	47-63				
Cooling	AIR	AIR	AIR	WATER	WATER
Operation Temperature	15° - 30° C				
Operation Humidity	20% - 80%				
Storage Temperature	-20° - 50° C				

Note: 1. Contact AOC for additional wavelengths.
2. Contact AOC for higher power lasers.
3. Contact AOC for high frequency.
4. Defined as standard deviation/average.
5. Contact AOC for USB II & Ethernet.

**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 us.*

AWAVE SERIES
Industrial Lasers

ND:YV04 DUV Laser Systems

SPECIFICATIONS*	AWAVE 266-0.5W-20K	AWAVE 266-1W-20K	AWAVE 266-1.5W-20K	AWAVE 266-2W-20K	AWAVE 266-6W-30K
Wavelength[1]	266 nm				
Average Power[2]	0.5W	1W	1.5W	2W	3W
Pulse Repetition Rate[3]	Single Shot to 200 kHz				
Beam Quality (M^2)	<1.2				
Spatial Mode	TEM00				
Beam Roundness	>90%				
Pulse Width (ns)	<10ns @20kHz <30ns @100kHz	<10ns @20kHz <40ns @100kHz	<10ns @20kHz <40ns @100kHz	<10ns @20kHz <40ns @100kHz	<10ns @20kHz <40ns @100kHz
Pulse Energy (mJ @ 1kHz)	>25uJ	>50uJ	>75uJ	>100uJ	150uJ
Pulse-to-Pulse Stability[4]	<2% RMS				
Average Power Stability[4]	<3% over 12 hours				
Polarization Ratio	>100:1 LINEAR, HORIZONTAL				
Communication Protocol[5]	RS-232				
Operating Voltage (VAC)	90-260				
Line Frequency (Hz)	47-63				
Cooling	AIR	AIR	AIR	AIR/WATER	WATER
Operation Temperature	15° - 30° C				
Operation Humidity	20% - 80%				
Storage Temperature	-20° - 50° C				

Note: 1. Contact AOC for additional wavelengths.
2. Contact AOC for higher power lasers.
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PRODUCT DATA SHEET
NANO-DUV-263/266

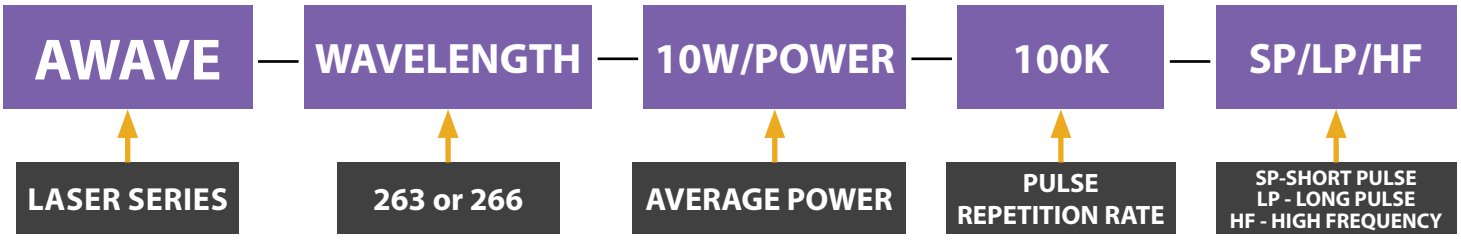
Dimensions & Weight

DIMENSIONS	DUV AIR	DUV WATER
Laser Head (in.)	8 x 5 x 3.45	9 x 8 x 3.75
Laser Controller (in.)	15 x 15 x 5	19 x 17 x 7
Umbilical (in./m.)	100 inches / 2.5 meters (all lasers)	

WEIGHT	DUV AIR	DUV WATER
Laser Head (lbs.)	4.5	6
Laser Controller (lbs.)	12	15

Order Information

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



COMPLIANCE: CDRH, ROHS, CE