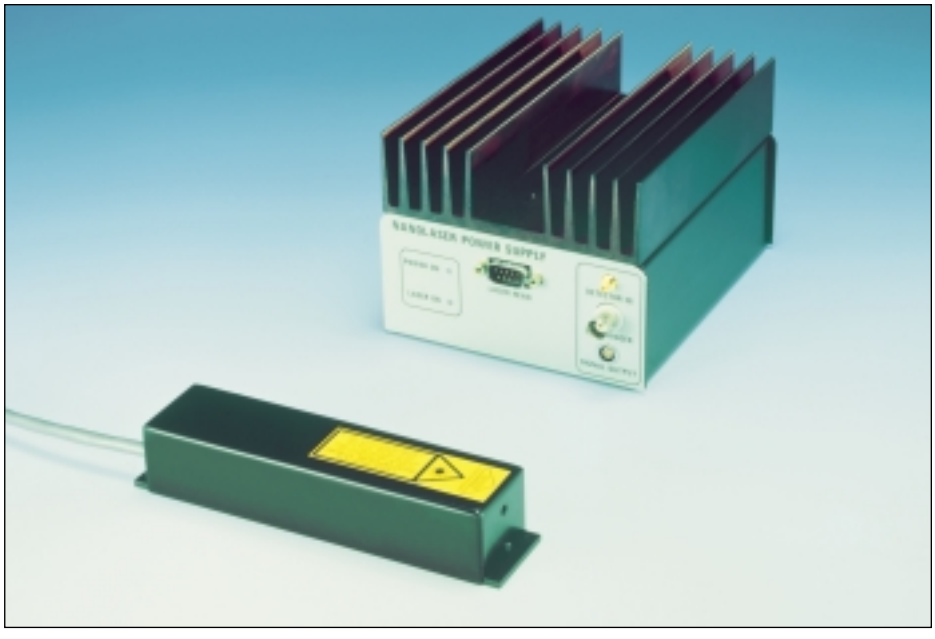


NEW FROM NEWPORT

UV MODELS

Key Features

- *266 nm, 355 nm, 532 nm, and 1064 nm outputs available*
- *High average and peak output powers*
- *Compact package design*
- *Ideal for both laboratory and OEM applications*
- CDRH *Certified*

NanoLaser™ passive Q-switched microchip lasers produce high power, high repetition rate and short pulses from compact, turnkey packages. The laser cavity consists of a 2 mm^3 Nd:YAG gain medium bonded to a chromium doped YAG saturable absorber. The cavity's mirrors are vapor deposited directly on each side of the crystal to form a rugged, monolithic oscillator that is end pumped by a CW diode laser. Combined with integral harmonic generators, the NanoLaser can convert the 1064 nm output to additional wavelengths: 532 nm, 355 nm and 266 nm.

The NanoPulse™ laser produces 1064 nm output, and can be optimized for either 50 mW of average power, or 6 µJ pulse energy. In either case the output is a pulse train of high peak power, sub-1 nsec, near-diffraction limited pulses.

The NanoGreen™ laser utilizes a KTP frequency doubler at the output of the same microchip that is used for the NanoPulse™ to produce 532 nm pulses. An IR blocking filter ensures that less than 0.1% of the output contains the residual 1064 nm light.

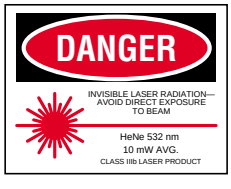
The NanoGreen™ can be specified for either 6 mW of average power, or 1 mJ of pulse energy. The mode is excellent and specified to have an M^2 better than 1.2.

Our **NEW** NanoUV™ lasers are a logical extension of our proven microchip technology. The UV lasers produce 1 mW of average power at either 355 nm or 266 nm by utilizing harmonic generation stages integrated in the laser head. A harmonic separation stage has been added to reduce the 1064 nm and 532 nm light to greater than 10,000 times below the level of the UV output.

Temperature stabilization to within 0.2°C is accomplished by incorporating a thermoelectric cooler within the NanoLasers' head, assuring optimum performance over a wide range of ambient conditions.

For operation of any of the NanoLaser™ family, simply attach the laser head to a heatsink (customer supplied) capable of dissipating 25 W of heat load (such as mounting *directly* to an optical table using our optional adaptor plate), plug the power supply into any 115 VAC wall outlet, and turn on the key-switch. All models are fully CRDH compliant, although OEM versions are also available.

NanoPulse



NanoGreen

US – CDRH

Europe – IEC

Model	NanoPulse™ NP-0621-1	NanoPulse™ NP-5011-1	NanoGreen™ NG-0611-1	NanoGreen™ NG-0121-1	NanoUV™ NV-0111-1	NanoUV™ NU-0111-1
Wavelength [nm]	1064	1064	532	532	355	266
Average Power [mW]	—	>50	>6	—	>1	>1
Energy [µJ]	>6	—	—	>1	—	—
Rep Rate [kHz](1)	2–5	20–30	15–30	10–20	10–15	8–13
Pulse Width [ns]	<1	<1	<1	<1	<0.8	<0.8
Beam Profile	TEMoo	TEMoo	TEMoo	TEMoo	Near-Gaussian	Near-Gaussian
Beam Diameter [mm]	<0.2	<0.2	<0.2	<0.2	<0.5 (H) x <0.5 (V)	<0.5 (H) x <0.5 (V)
Beam Divergence [mrad]	±1	±1	±2	±2	<3 (H) <1 (V)	<3 (H) <1 (V)
Polarization Ratio	>100:1, direction unspecified	>100:1, direction unspecified	>100:1, direction unspecified	>100:1, direction unspecified	>100:1, vertical	>100:1, vertical
Ellipticity	<1.1:1	<1.1:1	<1.1:1	<1.1:1	NA	NA
Power Stability, 1 hr (2)	<±3%	<±3%	<±3%	<±3%	<±5%	<±5%
Heatsink Operating Temperature [°C]	0 to 50	0 to 50	0 to 50	0 to 50	15 to 35	15 to 35
Head Size (WxHxD)[mm]	100 x 22.5 x 31	100 x 22.5 x 31	100 x 22.5 x 31	100 x 22.5 x 31	163 x 36 x 31	153 x 36 x 31
Power Supply Size (WxHxD)[mm]	125 x 97 x 160	125 x 97 x 160	125 x 97 x 160	125 x 97 x 160	125 x 97 x 160	125 x 97 x 160
Head Weight [g]	250	250	250	250	350	350
CDRH Class	IIIb	IIIb	IIIb	IIIb	IIIb	IV

1) Will vary within stated range, from laser to laser.
2) After 15 minute warm up period and temperature variations less than ±3°C/hr and ±3°C range.

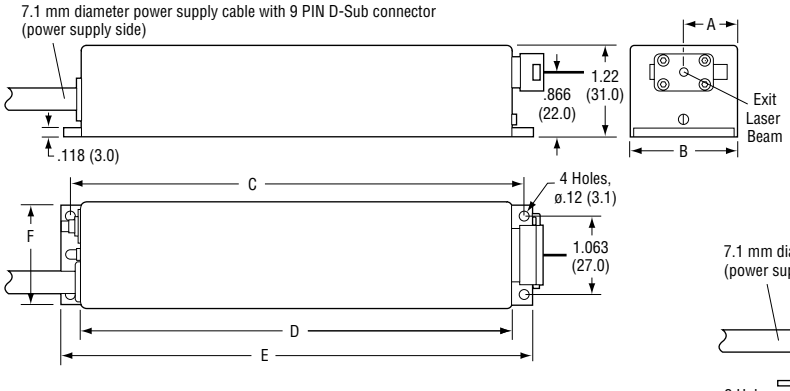
Note: For 220V version, change second to last number to "2" (i.e. NP-0622-1)

Accessory

Model	Description
N-M3-ADAPT	Adapter plate for mounting Nanolasers to English/metric optical tables

Dimensions

NanoUV



MODEL	A	B	C	D	E	F
DIMENSION						
INCHES						
NU-0111-1	.736	1.472	5.669	5.370	5.906	1.378
NV-0111-1	.717	1.433	6.063	5.764	6.299	1.338
MILLIMETERS						
NU-0111-1	19.8	37.4	144.0	136.4	150.0	35.0
NV-0111-1	.717	36.4	154.0	146.4	160.0	34.0

NanoPulse/Green