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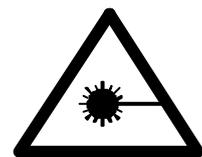
Polaris Product Specifications

	<u>1064 nm</u>	<u>532 nm</u>	<u>355 nm</u>	<u>266 nm</u>
Pulse Energy^{1,2}				
Polaris II	50 mJ	30 mJ	7 mJ	5 mJ
Polaris III	90 mJ	50 mJ	11 mJ	10 mJ
Beam Diameter⁴				
Polaris II	3 mm	2.75 mm	2.5 mm	2.5 mm
Polaris III	4 mm	3.75 mm	3.5 mm	3.5 mm
Pulse Width³	4-5 ns	3-4 ns	3-4 ns	3-4 ns
Beam Divergence				
Polaris II	<4.5 mrad	<3.5 mrad	<2.5 mrad	<2.5 mrad
Polaris III	<5 mrad	<4 mrad	<3 mrad	<3 mrad
Pulse to Pulse Stability²	± 3%	± 4%	± 5%	± 6%
Jitter	1 ns	1 ns	1 ns	1 ns
Repetition Rate				
Polaris II	20 Hz or 30 Hz			
Polaris III	10 Hz or 20 Hz			
Beam pointing	< 100 ±urad	< 200 ±urad	<250 ±urad	< 250 ±urad
IR Beam Quality⁵ (TDL)	6	--	--	--

- Optical losses due to optional attenuator will reduce maximum energy by 10%
- Pulse-to-pulse for 98% of shots after 30 minute warm up
- Full width half maximum
- Full angle for 86% of the energy, at 1/e² point
- Times diffraction limited, at 1/e² point

Physical Characteristics

	Laser Head	Power Supply	Control Panel
Length	11.7" / 297 mm	14.5" / 368 mm	6.0" / 152 mm
Width	5.7" / 146 mm	7.65" / 194 mm	8.1" / 206 mm
Height	3.0" / 75 mm	10.9" / 177 mm	3.5" / 89 mm
Weight	10 lb. / 4.5 kg	30 lb. / 13.6 kg	5 lb. / 2.3 kg
Length Umbilical	8 ft / 2.4 m		10 ft / 3 m



VISIBLE AND INVISIBLE
 LASER RADIATION. AVOID
 EYE AND SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION
 Wavelength 1064 nm/150 mJ/4-5 ns
 Wavelength 532 nm/100 mJ/3-4 ns
 Wavelength 355 nm/50 mJ/3-4 ns
 Wavelength 266 nm/30 mJ/3-4 ns
 Wavelength 213 nm/10 mJ/3-4 ns
CLASS 4 LASER PRODUCT

Operating Requirements

Temperature	70° ± 10° F (21° ± 5° C)
Relative Humidity	20 – 80% non-condensing
Voltage	100 - 240 VAC, 50/60 Hz
Power	250 Watts

New Wave Research works to continuously improve products. Specifications are subject to change without prior notice.

Standard Features:

- Laser head – 1064 nm (wide body ready for harmonic generators & motorized attenuator)
- Power supply with 100– 240 VAC 50/60 Hz operation
- Remote Control Panel
- RS232 port
- Port for external TTL control (also used by Remote Panel)
- DI water (about 1 quart or 800 ml) and water fill bottle
- Operating Manual
- CE approval

Options:

- Harmonic generators and dichroic mirror sets for 532 nm, 355 nm and 266 nm.
- Motorized optical attenuator
- Heaters for Polaris II harmonic generators. Heaters are standard on Polaris III harmonic generators.

