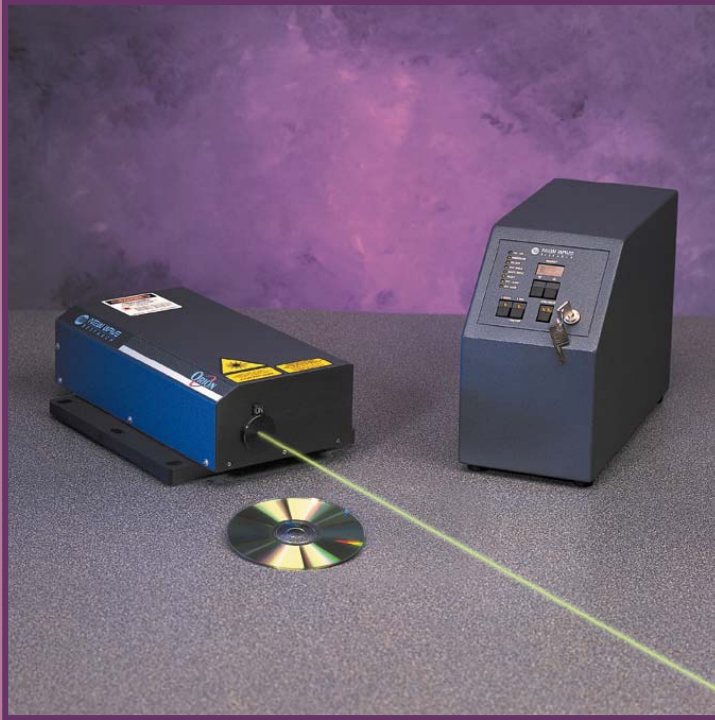


Orion

Air Cooled Nd:YAG Laser Systems



Orion's extremely compact size makes it the smallest laser in the Scientific product line. The light-weight small size coupled with an air-cooled design create an highly portable laser ideally suited for scientific applications in the field. The Orion laser is available in several wavelengths and a small range of repetition rates.

Features

- Air-cooled design delivers an extremely compact and light-weight laser
- Beam divergence less than 5 mrad at 1064 nm
- Repetition rates from 1 to 5 Hz
- Single shot and burst firing modes
- Optional remote control panel, motorized optical attenuator



NEW WAVE
RESEARCH

Orion Products

	1064 nm	532 nm	355 nm	266 nm
Energy ^{1,2} (mJ)	35	17	4	3
Beam Diameter ³ (mm)	3	2.75	2.5	4.5
Pulse Width ⁴ (ns)	5-7	4-6	4-5	4-5
Beam Divergence ⁴ (mrad)	< 5	< 4	< 3	< 3
Repetition Rate	1 Shot, 1PPS (Hz), or 5PPS (5Hz) for 50 shots followed by 20 seconds off			
Pulse to Pulse Stability ² (±%)	6.5	7.5	9	10
Jitter (±ns)	1	1	1	1
Laser Classification	Class IV			

1. Optical losses due to optional attenuator will reduce maximum energy by 10%

2. Pulse-to-pulse stability at 1 pps for 95% of shots for 200 shots after 10 minute warm up

3. Full angle for 86% of the energy, at 1/e² point

4. Full width half maximum⁴

Physical Characteristics

	Laser Head	Power Supply	Control Panel
Length	13.775" / 350 mm	16.06"/408 mm	19.0"/483 mm
Width	7.0" / 178 mm	8.0"/203 mm	8.6"/218 mm
Height	3.187" / 81 mm	4.125"/105 mm	15.0"/38 mm
Weight	10 lbs. / 4.5 kg	21.5 lbs./9.8 kg	55 lbs/25 kg
Length Umbilical	8 ft / 2.4 m	8 ft / 2.4 m	

Operating Requirements

Temperature	50°—86° F (10°—30° C)
Relative Humidity	20—80% non-condensing
Voltage	95—250 VAC, 50/60 Hz
Power	50 watts



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