

Tempest

HIGH ENERGY Nd:YAG LASER SYSTEMS

Products

		Tempest 10	Tempest 20	Tempest 30	Tempest 300
Repetition Rate (Hz)		10	20	30	10
Energy ¹ (mJ)	1064 nm	200	200	180	300
	532 nm	100	100	90	180
	355 nm	50	50	40	75
	266 nm	30	30	20	40
Energy Stability ² (%)	1064 nm	2	2	2.5	2
	532 nm	3.5	3.5	4	4
	355 nm	8	8	9	9
	266 nm	9	9	10	10
Pulse Width ³ (ns)		3-5	3-5	3-5	3-5
Beam Diameter (mm)		5	5	5	6
Divergence ⁴ (mrad)		< 1	< 1	< 1	< 1
Beam Pointing Stability (µrad)		< 100	< 200	< 250	< 200
IR Beam Quality ⁵ (TDL)		1.5	1.5	2	1.5
Jitter (±ns) ⁶		0.5	0.5	0.5	0.5

Notes:

- 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
- From Q-Switch synch out pulse to light pulse for 98% of 1,000 shots

Nominal Dimensions⁷

	LASER HEAD				
	Tempest 10, 20, & 30	Tempest 300	Baseplate	Power Supply	Control panel
Length	13.4" / 34.0 cm ⁸	15.0" / 38.0 cm ⁸	7.0" / 17.8 cm	20.5" / 52.1 cm ⁸	6.3" / 16.0 cm
Width	7.0" / 17.8 cm	7.0" / 17.8 cm	9.0" / 22.9 cm	8.7" / 22.1 cm	8.2" / 20.8 cm
Height	3.5" / 8.9 cm	3.5" / 8.9 cm	0.5" / 1.3 cm	15.7" / 39.9 cm	3.5" / 8.9 cm
Weight	12 lbs / 5.5 kg	15 lbs / 6.8 kg	5 lbs / 2.3 kg	55 lbs / 25 kg	5 lbs / 2.3 kg
Length Umbilical	8 ft / 2.4 m	8 ft / 2.4 m	—	—	10 ft / 3.0 m

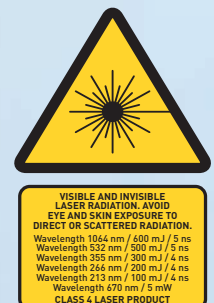
- Notes: 7. Nominal values only; contact NWR representative for full specifications
8. Add 5.0"/13.0 cm for umbilical bend radius

Operating Requirements

Temperature	70° ± 10° F (21° ± 5° C)
Relative Humidity	20 to 80% non-condensing
Voltage	95—120 V or 200—250 VAC, 50/60 Hz
Power Consumption	< 800 watts

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