

SPECTRA-PHYSICS Stabilite® Series Laser Beam Specifications

Output Characteristics	Stabilite 2017 ¹		Stabilite 2018 ¹ -RM
	-AR	-KR	
Multiline Output Power ² 333.6–363.8 nm (UV) ³ 457.9–514.5 nm (Vis) 647.1–676.4 nm (Vis)	100 mW 6.0 W —	— — 600 mW	— — —
All-Lines Output Power			2.5 W
Single-Line Output Power ² 454.5 nm 457.9 nm 465.8 nm 472.7 nm 476.5 nm 488.0 nm 496.5 nm 501.7 nm 514.5 nm 520.8 nm 530.9 nm 568.2 nm 647.1 nm 676.4 nm	100 mW 200 mW 120 mW 170 mW 450 mW 1.5 W 600 mW 300 mW 2.0 W — — — — —	— — — — — — — — — — — — 500 mW 120 mW	— 30 mW — — 150 mW 250 mW — — 250 mW 100 mW 200 mW 150 mW 300 mW —
Beam Diameter ⁴ , at 1/e ² points	1.4 mm	1.1 mm	1.8 mm ± 10%
Beam Divergence ⁴	0.5 mrad	0.7 mrad	0.7 mrad ± 10%
Polarization	100:1 vertical		≥ 100:1 vertical
Optical Noise ⁵ , Current Mode Power Mode	≤ 0.5% rms ≤ 0.5% rms		≤ 0.5% rms ≤ 0.5% rms
Power Stability ⁶ Current Mode Power Mode	± 1% ± 5%		± 1% ± 5%
Beam Pointing Stability ⁷	≤ 7.5 μrad/°C		≤ 7.5 μrad/°C

1. Due to our continuous product improvement program, specifications may change without notice.
2. Single-line power for argon lasers are specified at 514.5 and 488.0 nm and for krypton lasers at 647.1 and 676.4 nm only. Powers for all other lines indicated are nominal. Firm specifications require special testing and are only available at the time of purchase. All output power specifications, except multiline, refer to TEM₀₀.
3. Optional multiline UV specification requires additional optics and special testing and is only available at the time of purchase.
4. Specification for 514.5 nm (argon) or 647.1 nm (krypton). For other wavelengths, assuming no change in optical configuration, the diameter is given by $dia_1/dia_2 = \sqrt{\lambda_1/\lambda_2}$.
5. Specification represents rms noise at 514.5 nm (argon) or 647.1 nm (krypton), measured in a 10-Hz to 2-MHz bandwidth.
6. Specification applies during multiline operation for any 30-minute period after a 2-hour warm-up.
7. Specification applies after a 2-hour warm-up

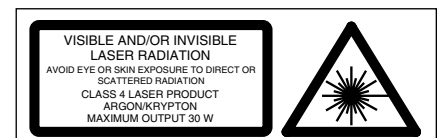


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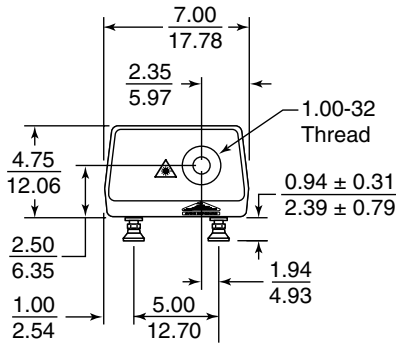
Australia: (61) 8-8443-8668
Belgium: (31) 40 265 99 59
China: (86) 10 6256 2934
France: (33) 1 6918 63 11
Germany: (49) 6151-708300
Hong Kong: (852) 2523-5688
India: (91) 80 6763 465

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Italy: (39) 02-57465-1
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Osaka (81) 6-6941-7331
Netherlands: (31) 40 265 99 59
S. Korea: (82) 2-587-8727
Spain: (34) 91-3775006

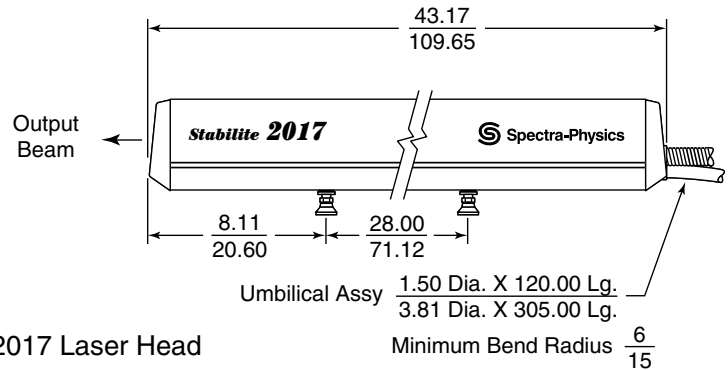
Scandinavia: (46) 8-550 10403
Taiwan: (886) 3-426-2376
UK: (44) 1442-258100
Other European Countries:
(49) 6151-7080
Other Pacific Countries:
1-650-961-2550



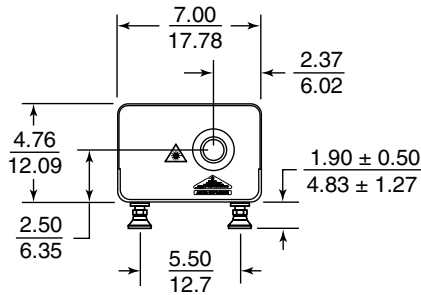
SPECTRA-PHYSICS Stabilite® Series Laser Cabinet Dimensions



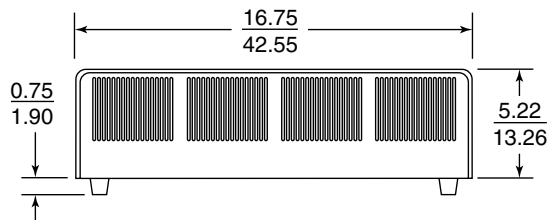
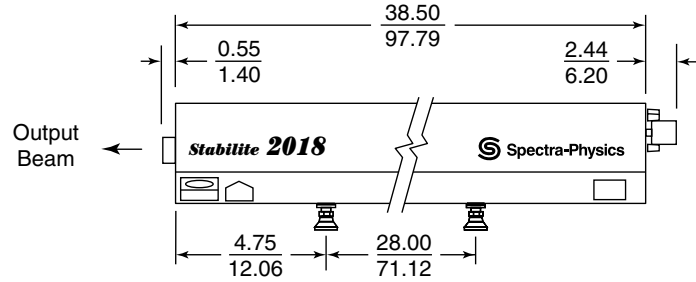
Stabilite 2017 Laser Head



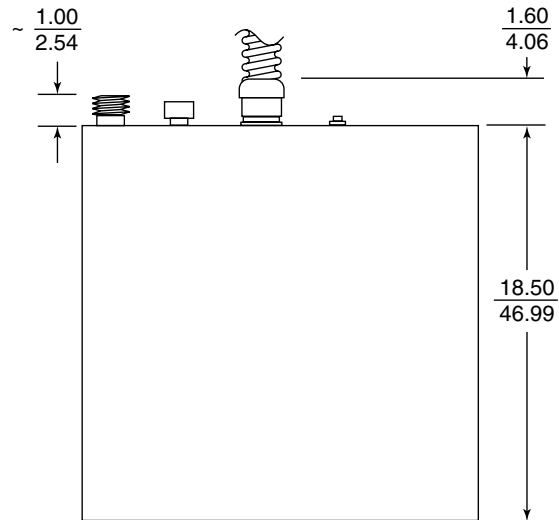
Umbilical Assy 1.50 Dia. X 120.00 Lg.
3.81 Dia. X 305.00 Lg.
Minimum Bend Radius $\frac{6}{15}$



Stabilite 2018 Laser Head



Model 2550/2551 Power Supply



All dimensions in $\frac{\text{inches}}{\text{cm}}$

		Stabilite 2017 Specifications ¹	Stabilite 2018 Specifications ¹
Weight (uncrated)	Laser Head	43.0 kg (95 lbs)	43.0 kg (95 lbs)
	Power Supply	32.0 kg (70 lbs)	32.0 kg (70 lbs)
Weight (crated)	Laser Head	50.5 kg (111 lbs)	50.5 kg (111 lbs)
	Power Supply	36.0 kg (79 lbs)	36.0 kg (79 lbs)
Input Power	Phase Voltage Current (max.)	3-phase with ground 208 ± 10% Vac, 50/60 Hz, 42 A per phase @ 208 V	3-phase with ground 400 ± 10% Vac, 50/60 Hz, 45 A per phase @ 208 V
Cooling Water	Flow Rate Pressure Temperature	8.4 lpm (2.2 gpm) 138–689 kPa (20–100 psig) 10–35°C (50–95 °F)	6.5 lpm (1.7 gpm) 138–689 kPa (20–100 psig) 10–35°C (50–95 °F)