SPECTRA-PHYSICS Stabilite® Series Laser Beam Specifications

Output	Stabilite 2017 ¹		Stabilite 2018 ¹ -RM
Characteristics	-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	— 30 mW — 150 mW 250 mW — 250 mW 100 mW 200 mW 150 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% ± 0.5%		± 1% ± 0.5%
Beam Pointing Stability ⁷	≤ 7.5 rad/°C		≤ 7.5 rad/°C

- 1. Due to our continuous product improvement program, specifications may change without notice.
- Single-line power for argon lasers are speicified 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 TEM...
- 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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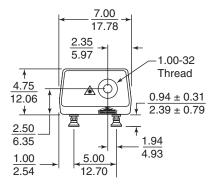
Netherlands: (31) 40 265 9 S. Korea: (82) 2-587-8727 Spain: (34) 91-3775006

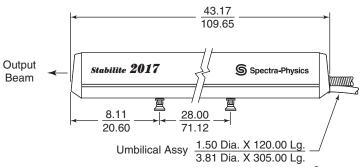
Scandinavia: (46) 8-550 10403 Taiwan: (886) 3-426-2376 UK: (44) 1442-258100 Other European Countries: (49) 6151-7080 Other Pacific Countries: 1-650-961-2550





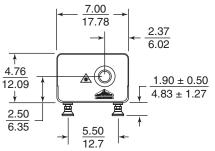
SPECTRA-PHYSICS Stabilite® Series Laser Cabinet Dimensions

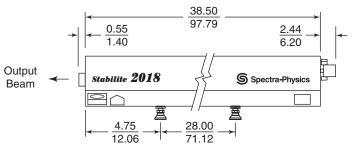




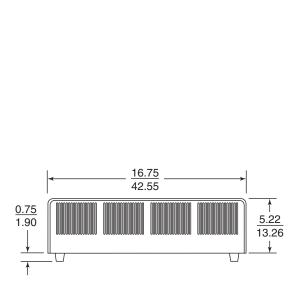
Stabilite 2017 Laser Head

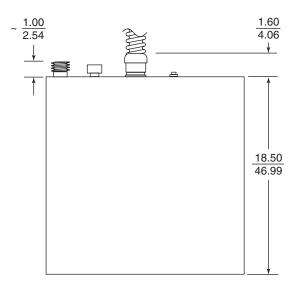
Minimum Bend Radius $\frac{6}{15}$





Stabilite 2018 Laser Head





Model 2550/2551 Power Supply

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

		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	3-phase with ground	3-phase with ground
	Voltage	208 ± 10% Vac, 50/60 Hz,	208 ± 10% Vac, 50/60 Hz,
	Current (max.)	42 A per phase @ 208 V	45 A per phase @ 208 V
Cooling Water	Flow Rate	8.4 lpm (2.2 gpm)	6.5 lpm (1.7 gpm)
	Pressure	138–689 kPa (20–100 psig)	138–689 kPa (20–100 psig)
	Temperature	10–35°C (50–95 °F)	10–35°C (50–95 °F)

