

Product Fact Sheet

Keysight 5517A, 5517B, 5517C, 5517CL, 5517D, 5517DL, 5517EL, 5517FL, 5517GL Laser Heads for Transducer Systems

The Keysight Technologies, Inc. 5517 series are Class II helium-neon lasers sources that provide highly stable and accurate 633 nm wavelength light for precision dual-frequency interferometry. A variety of Zeeman split frequencies, beam size, power levels, and special options are available to meet your systems requirements. Keysight lasers are known for their reliability, with a mean time between failures (MTBF) of greater than 50,000 hours typical.



5517C laser head

Key features

- 2 ppb vacuum wavelength stability (1 hour); 20 ppb (lifetime)
- ± 0.1 ppm wavelength accuracy standard; ± 0.02 ppm with optional calibration
- MTBF > 50,000 hours (typical)

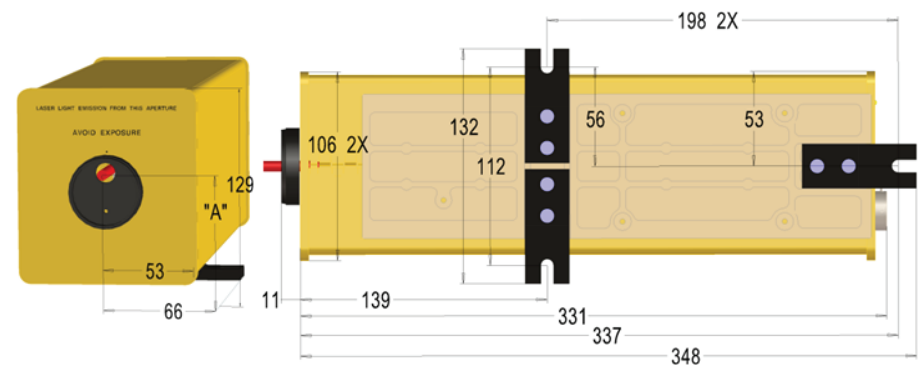
Model number ³	Maximum linear velocity (mm/s) ¹			Reference frequency (MHz)	Min output power (μW)	Warm-up time (min)	Available laser beam diameter (mm)
	10897D	10898D N1231A/B	N1225A				
5517A	411		316	1.5 to 2.0	> 180	< 10	6
5517B	538		443	1.9 to 2.4	> 120	90	6
5517C	696		601	2.4 to 3.0	> 180	90	3, 6, 9
5517CL				2.4 to 3.0	> 180	45 ⁵	6
5517D	1012		918	3.4 to 4.0	> 180	90	6, 9
5517DL	1329 ⁴		1234	> = 4.4	> 180	45 ⁵	6, 9
5517EL	1740 ⁴	1772 ⁴	1677	> = 5.8	> 65	45 ⁵	6
5517FL	1361 ⁴	2152 ⁴	2057	> = 7.0	> 65	45 ⁵	6, 9
5517GL ²	1297 ⁴	2215 ⁴	2120	> = 7.2	> 168	45 ⁵	9

1. Values are for worst case direction of travel (higher velocity generally possible in opposite direction), and for using linear (single pass, $\lambda/2$ optical resolution) optics.
2. Must be ordered with option 009.
3. Each laser head requires power supply. Use either an Keysight 10884B supply or equivalent to provide 15 V power to the laser head and receivers.
4. Requires use of E1709A receiver to obtain listed velocity.
5. Can be achieved if fan is connected to the vent body.

Option keys

Options	Description
003	3 mm output beam diameter
006	6 mm output beam diameter
009	9 mm output beam diameter

For more details on Keysight interferometry systems, components and ordering information please visit www.keysight.com/find/lasers



5517x/xL (except 5517A) Laser heads outside dimensions (5517xL cooling duct and perforations not shown). Beam height "A" is 79.5 mm for 5517x heads and 80.8 mm for 5517xL heads.

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