

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 5517CL

Mass 5517CL Class: 3.2 kg (5517CL data sheet) Plus 15 V Current 5517CL: 2.2 A maximum (5517CL data sheet) Minus 15 V Current 5517CL: 0.02 A maximum (5517CL data sheet) Numeric rows from Keysight 5517A/B/C/CL/D/DL/EL/FL/GL Laser Heads for Transducer Systems product fact sheet 5990-5634. 5517CL electrical, mass, airflow, and vacuum wavelength rows also from the 5517CL Laser Head data sheet. High-velocity rows marked with E1709A on the fact sheet require that receiver. Plus 15 V Current 5517CL: 2.2 A maximum (5517CL data sheet) Minus 15 V Current 5517CL: 0.02 A maximum (5517CL data sheet) Numeric rows from Keysight 5517A/B/C/CL/D/DL/EL/FL/GL Laser Heads for Transducer Systems product fact sheet 5990-5634. 5517CL electrical, mass, airflow, and vacuum wavelength rows also from the 5517CL Laser Head data sheet. High-velocity rows marked with E1709A on the fact sheet require that receiver.

**MODEL****Agilent / Keysight
5517CL****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****5517CL****LISTING**<https://aumictechlabs.com/products/5517cl-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 5517CL is a helium-neon laser head engineered for precision displacement and velocity measurement in VME and PC-based laser interferometer systems. This two-frequency continuous laser delivers wavelength stability and accuracy suitable for semiconductor lithography, flat panel manufacturing, and precision metrology applications requiring strict thermal control. Technical Specifications Laser Output Type: Helium-neon, continuous, two-frequency

Wavelength (nominal vacuum): 632.99137 nm Wavelength accuracy (3 sigma, lifetime): 0.1 ppm
Wavelength accuracy (optional A6J): 0.02 ppm Wavelength stability (1 hour typical): 0.002 ppm
Wavelength stability (lifetime typical): 0.02 ppm Maximum beam power output: 180 microwatts
Beam diameter standard: 6 mm (3 mm or 9 mm options available) Beam height: 80.8 ± 1.0 mm
Split beam orthogonality (Option 301): 0.7 degrees Performance Parameters Reference frequency:
2.4 MHz to 3.0 MHz Maximum velocity (linear optics): 700 m/s Maximum velocity (plane mirror
optics): 350 m/s Mean time between failures: > 50,000 hours (typical) Warm-up time: 45 minutes
(with vented cover fan and exhaust) Physical & Operational Dimensions: $359 \times 129 \times 132$ mm
Weight: 3.2 kg Power supply: +15 V (± 0.3 V at 2.2 A maximum), -15 V (± 0.3 V at 0.02 A maximum)
Enclosure: IP10 per IEC 529 Cabling clearance: 10.16 cm beyond rear panel Airflow requirement: 4
m/s minimum through 50 mm diameter duct Laser classification: Class II per 21 CFR 1040.10 and
1040.11 Key Features 0.1 ppm wavelength accuracy over lifetime ensures traceable measurements
Selectable beam diameters (3, 6, or 9 mm) for system optimization Two-frequency heterodyne
architecture enables bidirectional displacement sensing Compact form factor: 3.2 kg with
integrated beam path Extended MTBF rating supports 24/7 production environments Typical
Applications Semiconductor lithography alignment and overlay measurement Flat panel display
manufacturing process control Precision machine tool calibration and verification High-speed
linear stage velocity profiling Laser interferometer reference source Compatibility & Integration
The 5517CL integrates with Keysight VME and PC-based laser interferometer systems, pairing
with dedicated electronics modules and optical heads for complete measurement systems. Direct
compatibility with Keysight interferometer optics and signal conditioning electronics is required for
operation.

5517CL Characteristics / Specifications

PARAMETER	VALUE
Model	5517CL
Instrument Type	Two-frequency HeNe laser head
Series Family	Keysight 5517/5519 laser heads
Laser Type	helium-neon, continuous, two-frequency
Wavelength Accuracy Standard	plus or minus 0.1 ppm
Wavelength Accuracy Optional Cal	plus or minus 0.02 ppm
Vacuum Wavelength Stability 1 Hour	2 ppb
Vacuum Wavelength Stability Lifetime	20 ppb
Mtbf Typical	greater than 50,000 hours typical
Reference Frequency	2.4 to 3.0 MHz
Minimum Output Power	greater than 180 uW
Warm Up Time	45 minutes (fan connected to vent body)
Available Beam Diameter	6 mm standard; 3 mm option 003; 9 mm option 009 (5517CL data sheet)
Max Linear Velocity 10897D 10898D N12	less than about 700 mm/s with linear optics (5517CL data sheet)
Max Linear Velocity N1225A	less than about 350 mm/s with plane mirror (5517CL data sheet)
Dimensions 5517CL	359 × 129 × 132 mm (5517CL data sheet)
Maximum Beam Power Output Family	less than 1 mW (Class II)
Beam Height 5517xL	80.8 mm
Power Supply	Keysight 10884B or equivalent plus/minus 15 V
Laser Class	Class II / 21 CFR 1040.10 and 1040.11
Documentation	Keysight 5517 series product fact sheet 5990-5634
Vacuum Wavelength Nominal Family	632.99137 nm class (5517CL data sheet 632.99137 nm)
Airflow 5517CL Class	4 m/s min exiting 50 mm duct (5517CL data sheet)
Enclosure 5517CL Class	IP10 per IEC 529 (5517CL data sheet)
Mass 5517CL Class	3.2 kg (5517CL data sheet)

PARAMETER	VALUE
Plus 15 V Current 5517CL	2.2 A maximum (5517CL data sheet)
Minus 15 V Current 5517CL	0.02 A maximum (5517CL data sheet)
Wavelength stability	1 Hour: 2 ppb

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	5517CL
Instrument Type	Two-frequency HeNe laser head
Series Family	Keysight 5517/5519 laser heads
Laser Type	helium-neon, continuous, two-frequency
Wavelength Accuracy Standard	plus or minus 0.1 ppm
Wavelength Accuracy Optional Cal	plus or minus 0.02 ppm
Vacuum Wavelength Stability 1 Hour	2 ppb
Vacuum Wavelength Stability Lifetime	20 ppb
Mtbf Typical	greater than 50,000 hours typical
Reference Frequency	2.4 to 3.0 MHz
Minimum Output Power	greater than 180 uW
Warm Up Time	45 minutes (fan connected to vent body)
Available Beam Diameter	6 mm standard; 3 mm option 003; 9 mm option 009 (5517CL data sheet)
Max Linear Velocity 10897D 10898D N1231	less than about 700 mm/s with linear optics (5517CL data sheet)
Max Linear Velocity N1225A	less than about 350 mm/s with plane mirror (5517CL data sheet)
Dimensions 5517CL	359 x 129 x 132 mm (5517CL data sheet)
Maximum Beam Power Output Family	less than 1 mW (Class II)
Beam Height 5517xL	80.8 mm
Power Supply	Keysight 10884B or equivalent plus/minus 15 V
Laser Class	Class II / 21 CFR 1040.10 and 1040.11
Documentation	Keysight 5517 series product fact sheet 5990-5634
Vacuum Wavelength Nominal Family	632.99137 nm class (5517CL data sheet 632.99137 nm)
Airflow 5517CL Class	4 m/s min exiting 50 mm duct (5517CL data sheet)
Enclosure 5517CL Class	IP10 per IEC 529 (5517CL data sheet)
Mass 5517CL Class	3.2 kg (5517CL data sheet)
Plus 15 V Current 5517CL	2.2 A maximum (5517CL data sheet)

PARAMETER	VALUE
Minus 15 V Current 5517CL	0.02 A maximum (5517CL data sheet)

Notes

Numeric rows from Keysight 5517A/B/C/CL/D/DL/EL/FL/GL Laser Heads for Transducer Systems product fact sheet 5990-5634. 5517CL electrical, mass, airflow, and vacuum wavelength rows also from the 5517CL Laser Head data sheet. High-velocity rows marked with E1709A on the fact sheet require that receiver.

Ordering Information

OPTION	DESCRIPTION
Option 009	(5517CL data sheet)

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.