


Aumictech

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 81960A 1505-1630nm Tunable Laser Source

Agilent Keysight 81960A Fast Swept Compact Tunable Laser The Keysight 81960A is a fast-swept compact tunable laser module covering 1505 nm to 1630 nm. OEM compact TLS data sheet 5988-8518EN lists 0.1 pm resolution, ± 10 pm absolute wavelength accuracy, bidirectional specified sweeps, $\geq +13$ dBm from 1570 to 1620 nm, and dynamic accuracy tables through 200 nm/s. High-repetition-rate IL of add-drop filters with N7744A/N7745A power meters; PDL/DGD with N7788B; DWDM component adjustment using N7700 fast-sweep engines. The Keysight 81960A is a fast-swept compact tunable laser module covering 1505 nm to 1630 nm. OEM compact TLS data sheet 5988-8518EN lists 0.1 pm resolution, ± 10 pm absolute wavelength accuracy, bidirectional specified sweeps, $\geq +13$ dBm from 1570 to 1620 nm, and dynamic accuracy tables through 200 nm/s. High-repetition-rate IL of add-drop filters with N7744A/N7745A power meters; PDL/DGD with N7788B; DWDM component adjustment using N7700 fast-sweep engines. Bidirectional continuous sweeps with specified dynamic accuracy



MODEL

**Agilent / Keysight
81960A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

81960A

LISTING

<https://aumictechlabs.com/products/81960a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 81960A is a fast-swept tunable laser source delivering precise wavelength control across the C-band and L-band spectrum. Operating from 1505 nm to 1630 nm, this compact

instrument generates output power from +6 dBm to +14 dBm with ± 10 pm wavelength accuracy during dynamic sweeps. Built for high-repetition-rate applications, the 81960A achieves scan speeds up to 200 nm/s (1528–1608 nm range) and supports bidirectional sweeping at better than 2 Hz repetition rates, enabling rapid real-time adjustments in production and development environments.

Technical Specifications

Wavelength Range: 1505 nm to 1630 nm (C-band and L-band) Output Power: +6 dBm to +14 dBm, adjustable Scan Speed: Up to 200 nm/s (sweep range 1528–1608 nm) Repetition Rate: Better than 2 Hz with bidirectional sweeping Wavelength Accuracy: ± 10 pm during sweeping Wavelength Resolution: 0.1 nm Fiber Interface: Keyed angled polarization-maintaining (PM) fiber with Option 072 Panda-type PM fiber for APC connectors (E-2000 APC, SC/APC, FC/APC)

Key Features

Fully specified bidirectional swept measurements with dynamic sweep specification for enhanced repetition rates Built-in coherence control and Stimulated Brillouin Scattering (SBS) suppression Output on/off control via front panel, GUI parameter, or remote GPIB commands with 'Active' LED indicator Housed in Agilent 8136B mainframe; performance depends on mainframe environmental specifications

Typical Applications

DWDM component characterization, including add-drop filter testing and adjustment Optical transceiver testing for telecommunications systems requiring single-mode, high side-mode suppression sources Optical sensor applications demanding narrow linewidth performance Passive fiber optic component testing

Compatibility & Integration

Fully compatible with N7700A measurement engines, 816x Plug&Play driver, and N4150A Photonic Foundation Library. Supports direct SCPI commands and integrates with N7700A software suite, including the N7700A-102 fast spectral loss engine for power and insertion loss measurements with N7744A or N7745A multiport power meters. Suitable for PMD and DGD characterization via N7788B component analyzer.

Features & description

From manufacturer datasheet

Built-in wavelength meter with dynamic wavelength logging

Coherence control and SBS suppression Single-slot 816x mainframe module Technical Specifications
Model: 81960A Instrument Type: Fast swept compact tunable laser source module Series Family:
Keysight 819xxA compact TLS Wavelength Range Option 162: 1505 nm to 1630 nm Wavelength
Resolution: 0.1 pm, 12.5 MHz at 1550 nm Mode Hop Free Tunability: full wavelength range Absolute
Wavelength Accuracy: ± 10 pm (typical ± 5 pm) Relative Wavelength Accuracy: ± 7 pm (typical ± 3 pm)
Wavelength Repeatability: ± 2.5 pm (typical ± 1.5 pm) Wavelength Stability Typical One Minute: $\leq \pm 0.5$
pm typical, 1 minute Wavelength Stability Typical Fifteen Minutes: $\leq \pm 2.5$ pm typical, 15 minutes
Maximum Output Power Peak Typical: $\geq +14$ dBm peak typical Maximum Output Power High Band: $\geq +13$
dBm, 1570 nm to 1620 nm Maximum Output Power Full Range: $\geq +10$ dBm, 1505 nm to 1630 nm Power
Range Nominal: +6 dBm to maximum output power Power Repeatability Typical: ± 0.01 dB typical Power
Stability One Hour: ± 0.01 dB, 1 hour; ± 0.03 dB typical, 24 hours Power Linearity: ± 0.15 dB at 1505 nm,
1575 nm, 1630 nm Power Flatness High Band: ± 0.2 dB, 1570 nm to 1620 nm at +13 dBm Power Flatness
Full Range: ± 0.3 dB, full wavelength range Sweep Absolute Accuracy Typical 5 nm/s: ± 5 pm typical

81960A Characteristics / Specifications

PARAMETER	VALUE
Model	81960A
Instrument Type	Fast swept compact tunable laser source module
Series Family	Keysight 819xxA compact TLS
Wavelength Range Option 1	1505 nm to 1630 nm
Wavelength Resolution	0.1 pm, 12.5 MHz at 1550 nm
Mode Hop Free Tunability	full wavelength range
Absolute Wavelength Accuracy	±10 pm (typical ±5 pm)
Relative Wavelength Accuracy	±7 pm (typical ±3 pm)
Wavelength Repeatability	±2.5 pm (typical ±1.5 pm)
Wavelength Stability Typical One Minute	≤ ±0.5 pm typical, 1 minute
Wavelength Stability Typical Fifteen Minutes	≤ ±2.5 pm typical, 15 minutes
Maximum Output Power Peak Typical	≥ +14 dBm peak typical
Maximum Output Power High Band	≥ +13 dBm, 1570 nm to 1620 nm
Maximum Output Power Full Range	≥ +10 dBm, 1505 nm to 1630 nm
Power Range Nominal	+6 dBm to maximum output power
Power Repeatability Typical	±0.01 dB typical
Power Stability One Hour	±0.01 dB, 1 hour; ±0.03 dB typical, 24 hours
Power Linearity	±0.15 dB at 1505 nm, 1575 nm, 1630 nm
Power Flatness High Band	±0.2 dB, 1570 nm to 1620 nm at +13 dBm
Power Flatness Full Range	±0.3 dB, full wavelength range
Sweep Absolute Accuracy Typical 5 nm/s	±5 pm typical
Sweep Absolute Accuracy Typical 50 nm/s	±8 pm typical
Sweep Absolute Accuracy Typical 200 nm/s	±15 pm typical

PARAMETER	VALUE
Linewidth Typical Coherence Off	100 kHz typical
Effective Linewidth Coherence On Typical	greater than 50 MHz typical at max constant output power
Smsr Typical	≥50 dB typical
Signal To Sse Ratio	≥45 dB/nm full range at +10 dBm; ≥50 dB/nm 1525 to 1620 nm at +12 dBm
Rin Typical	minus 145 dB/Hz typical, 0.1 GHz to 6 GHz
Module Dimensions	75 mm x 32 mm x 335 mm
Module Weight	0.95 kg
Host Mainframes	8163A/B, 8164A/B, 8166A/B
Wavelength range	Option 162: 1505 nm to 1630 nm
Wavelength stability	Typical One Minute: ≤ ±0.5 pm typical, 1 minute
Linewidth	Typical Coherence Off: 100 kHz typical
Effective linewidth	Coherence On Typical: greater than 50 MHz typical at max constant output power
Maximum output power	Peak Typical: ≥+14 dBm peak typical
Power repeatability	Typical: ±0.01 dB typical
Power stability	One Hour: ±0.01 dB, 1 hour; ±0.03 dB typical, 24 hours

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	81960A
Instrument Type	Fast swept compact tunable laser source module
Series Family	Keysight 819xxA compact TLS
Wavelength Range Option 162	1505 nm to 1630 nm
Wavelength Resolution	0.1 pm, 12.5 MHz at 1550 nm
Mode Hop Free Tunability	full wavelength range
Absolute Wavelength Accuracy	±10 pm (typical ±5 pm)
Relative Wavelength Accuracy	±7 pm (typical ±3 pm)
Wavelength Repeatability	±2.5 pm (typical ±1.5 pm)
Wavelength Stability Typical One Minute	≤ ±0.5 pm typical, 1 minute
Wavelength Stability Typical Fifteen Minutes	≤ ±2.5 pm typical, 15 minutes
Maximum Output Power Peak Typical	≥+14 dBm peak typical
Maximum Output Power High Band	≥+13 dBm, 1570 nm to 1620 nm
Maximum Output Power Full Range	≥+10 dBm, 1505 nm to 1630 nm
Power Range Nominal	+6 dBm to maximum output power
Power Repeatability Typical	±0.01 dB typical
Power Stability One Hour	±0.01 dB, 1 hour; ±0.03 dB typical, 24 hours
Power Linearity	±0.15 dB at 1505 nm, 1575 nm, 1630 nm
Power Flatness High Band	±0.2 dB, 1570 nm to 1620 nm at +13 dBm
Power Flatness Full Range	±0.3 dB, full wavelength range
Sweep Absolute Accuracy Typical 5 nm/s	±5 pm typical
Sweep Absolute Accuracy Typical 50 nm/s	±8 pm typical
Sweep Absolute Accuracy Typical 200 nm/s	±15 pm typical
Linewidth Typical Coherence Off	100 kHz typical
Effective Linewidth Coherence On Typical	greater than 50 MHz typical at max constant output power

PARAMETER	VALUE
Smsr Typical	≥50 dB typical
Signal To Sse Ratio	≥45 dB/nm full range at +10 dBm; ≥50 dB/nm 1525 to 1620 nm at +12 dBm
Rin Typical	minus 145 dB/Hz typical, 0.1 GHz to 6 GHz
Module Dimensions	75 mm x 32 mm x 335 mm
Module Weight	0.95 kg
Host Mainframes	8163A/B, 8164A/B, 8166A/B

Notes
Numeric rows from Keysight compact tunable laser data sheet 5988-8518EN for 81960A Option E62/162. Sweep-range footnotes reduce span at 200 nm/s to 1528 to 1608 nm.

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 14, 2026

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