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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N7711A Single-Port Tunable Laser Up to +15 dBm C-band and L-band

Remote Interfaces: USB 2.0, LAN 10/100 Mbit/s, GPIB Line Power: AC 100 to 240 V $\pm$ 10 percent, 50/60 Hz Recommended Recalibration Period: 24 months Numeric rows from Agilent N7711A, N7714A Tunable Laser Sources data sheet 5990-5512EN. Specs apply to wavelengths on the 50 GHz ITU-T grid after warm-up. Agilent Keysight N7711A Tunable Laser Source The Agilent/Keysight N7711A is a single-port compact tunable laser in the N77 1U half-rack platform. OEM N7711A/N7714A data sheet 5990-5512EN lists C-band 1527.60 to 1565.50 nm or L-band 1570.01 to 1608.76 nm, $\pm$ 22 pm absolute wavelength accuracy, +13.5 dBm maximum output (typical +15 dBm), and linewidth less than 100 kHz typical. WDM system loading on ITU grids; coherent mixing with offset-grid fine tuning; drop-in replacement for 81950A in N77 form factor.



MODEL

**Agilent / Keysight
N7711A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N7711A

LISTING

<https://aumictechlabs.com/products/n7711a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N7711A is a single-port tunable laser source delivering continuous wavelength coverage across the C-band and L-band with output power up to +15 dBm. Engineered for telecommunications component testing, optical network characterization, and coherent mixing applications, it combines high wavelength accuracy, exceptional stability, and narrow linewidth in

a compact form factor. Technical Specifications Wavelength and Tuning C-band: 1527.60 nm to 1565.50 nm (196.25 THz to 191.50 THz) L-band: 1570.01 nm to 1608.76 nm (190.95 THz to 186.35 THz) Frequency resolution: 100 MHz (0.8 pm at 1550 nm) Fine tuning range: ± 6 GHz typical Fine tuning resolution: 1 MHz typical Absolute wavelength accuracy: ± 22 pm (± 2.5 GHz) Relative wavelength accuracy: ± 12 pm (± 1.5 GHz) Wavelength repeatability: ± 2.5 pm (± 0.3 GHz) typical Wavelength stability: ± 2.5 pm (± 0.3 GHz) over 24 hours; ± 0.5 pm over 1 minute typical Tuning time: < 30 seconds typical Grid spacing: ITU-T (100 GHz, 50 GHz, 25 GHz) or arbitrary; gridless tuning capable Warm-up time: 1 hour for full specification compliance Optical Output Power Maximum output power: $\geq +15$ dBm typical; $\geq +13.5$ dBm minimum guaranteed Power adjustment range: 8 dB Power setting resolution: 0.1 dB Power stability: ± 0.03 dB over 24 hours and 1 hour typical Power flatness: ± 0.2 dB typical across full wavelength range Power repeatability: ± 0.08 dB typical Residual output power (shutter closed): ≤ -45 dBm Spectral Characteristics Linewidth: < 100 kHz typical Side mode suppression ratio: 50 dB typical Source spontaneous emission: 50 dB/nm typical at maximum output; 60 dB/0.1 nm typical Relative intensity noise: -145 dB/Hz typical (10 MHz to 40 GHz) SBS Suppression FM modulation range: 0 GHz to 1 GHz Dither frequency: 20.8 kHz Key Features Dual-band operation with seamless coverage options Offset fine-tuning exceeding ± 6 GHz Exceptional wavelength stability and repeatability Flat power response across C and L bands Low relative intensity noise for complex modulation formats Integrated SBS suppression capability Typical Applications Component characterization and testing Optical network performance validation Coherent detection system research WDM system development and verification Compatibility & Integration 9/125 μm Panda polarization-maintaining fiber connectivity. Control interfaces support integration into manufacturing test systems and laboratory setups.

N7711A Characteristics / Specifications

PARAMETER	VALUE
Model	N7711A
Instrument Type	Tunable laser source
Series Family	Keysight N77 optical test instruments
Optical Ports	1
Wavelength RangeCBand Option 2	1527.60 nm to 1565.50 nm (196.25 THz to 191.50 THz)
Wavelength RangeLBand Option 2	1570.01 nm to 1608.76 nm (190.95 THz to 186.35 THz)
Fine Tuning Range Typical	±6 GHz typical
Fine Tuning Resolution Typical	1 MHz typical
Absolute Wavelength Accuracy	±22 pm (±2.5 GHz)
Relative Wavelength Accuracy	±12 pm (±1.5 GHz)
Wavelength Repeatability Typical	±2.5 pm typical (±0.3 GHz)
Wavelength Stability Typical 24 Hours	±2.5 pm typical, 24 hours
Tuning Time Typical	less than 30 s typical
Maximum Output Power	+13.5 dBm (typical +15 dBm)
Power Stability Typical 24 Hours	±0.03 dB typical over 24 hours
Power Flatness Typical	±0.2 dB typical, full wavelength range
Power Repeatability Typical	±0.08 dB typical
Linewidth Typical Sbs Off	less than 100 kHz typical
Smsr Typical	50 dB typical
Signal To Sse Ratio Typical	50 dB/1 nm typical; 60 dB/0.1 nm typical
Rin Typical	minus 145 dB/Hz typical, 10 MHz to 40 GHz
Power Attenuation Range	8 dB
Power Setting Resolution	0.1 dB
Residual Output Power Shutter Closed	minus 45 dBm
Fiber Type	9/125 um Panda PMF

PARAMETER	VALUE
Laser Safety Class	Class 1M
Operating Temperature	+10 C to +35 C
Storage Temperature	minus 40 C to +70 C
Form Factor	one rack unit, half 19 inch width
Dimensions	43 mm x 212 mm x 372 mm
Weight	3.8 kg
Remote Interfaces	USB 2.0, LAN 10/100 Mbit/s, GPIB
Line Power	AC 100 to 240 V ± 10 percent, 50/60 Hz
Recommended Recalibration Period	24 months
Wavelength range	Power Repeatability Typical: ± 0.08 dB typical
Wavelength repeatability	Typical: ± 2.5 pm typical (± 0.3 GHz)
Wavelength stability	Typical 24 Hours: ± 2.5 pm typical, 24 hours
Linewidth	Typical Sbs Off: less than 100 kHz typical
Attenuation	Range: 8 dB
Power repeatability	Typical: ± 0.08 dB typical
Power stability	Typical 24 Hours: ± 0.03 dB typical over 24 hours

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +70 C
Operating temperature	+10 C to +35 C
Operating Temperature	+10 C to +35 C
Form Factor	one rack unit, half 19 inch width
Dimensions	43 mm x 212 mm x 372 mm
Weight	3.8 kg
Remote Interfaces	USB 2.0, LAN 10/100 Mbit/s, GPIB
Line Power	AC 100 to 240 V ±10 percent, 50/60 Hz
Recommended Recalibration Period	24 months Notes Numeric rows from Agilent N7711A, N7714A Tunable Laser Sources data sheet 5990-5512EN. Specs apply to wavelengths on the 50 GHz ITU-T grid after warm-up.

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	N7711A
Instrument Type	Tunable laser source
Series Family	Keysight N77 optical test instruments
Optical Ports	1
Wavelength RangeCBand Option 210	1527.60 nm to 1565.50 nm (196.25 THz to 191.50 THz)
Wavelength RangeLBand Option 201	1570.01 nm to 1608.76 nm (190.95 THz to 186.35 THz)
Fine Tuning Range Typical	±6 GHz typical
Fine Tuning Resolution Typical	1 MHz typical
Absolute Wavelength Accuracy	±22 pm (±2.5 GHz)
Relative Wavelength Accuracy	±12 pm (±1.5 GHz)
Wavelength Repeatability Typical	±2.5 pm typical (±0.3 GHz)
Wavelength Stability Typical 24 Hours	±2.5 pm typical, 24 hours
Tuning Time Typical	less than 30 s typical
Maximum Output Power	+13.5 dBm (typical +15 dBm)
Power Stability Typical 24 Hours	±0.03 dB typical over 24 hours
Power Flatness Typical	±0.2 dB typical, full wavelength range
Power Repeatability Typical	±0.08 dB typical
Linewidth Typical Sbs Off	less than 100 kHz typical
Smsr Typical	50 dB typical
Signal To Sse Ratio Typical	50 dB/1 nm typical; 60 dB/0.1 nm typical
Rin Typical	minus 145 dB/Hz typical, 10 MHz to 40 GHz
Power Attenuation Range	8 dB
Power Setting Resolution	0.1 dB
Residual Output Power Shutter Closed	minus 45 dBm
Fiber Type	9/125 um Panda PMF
Laser Safety Class	Class 1M

PARAMETER	VALUE
Operating Temperature	+10 C to +35 C
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Recommended Recalibration Period	24 months

Notes

Numeric rows from Agilent N7711A, N7714A Tunable Laser Sources data sheet 5990-5512EN. Specs apply to wavelengths on the 50 GHz ITU-T grid after warm-up.

Laser Safety

Laser Safety Class: Class 1M Operating Temperature: +10 C to +35 C Storage Temperature: minus 40 C to +70 C Form Factor: one rack unit, half 19 inch width Dimensions: 43 mm x 212 mm x 372 mm Weight: 3.8 kg Remote Interfaces: USB 2.0, LAN 10/100 Mbit/s, GPIB Line Power: AC 100 to 240 V ± 10 percent, 50/60 Hz Recommended Recalibration Period: 24 months Notes Numeric rows from Agilent N7711A, N7714A Tunable Lase

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

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