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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N5194A UXG X-Series Agile Vector Adapter, 50 MHz to 40 GHz

Operating Temperature For Specs: 0 C to 50 C after 1 hour warm-up Maximum CW Power Warranted Temperature: 15 C to 40 C Remote Interface: LAN USB SCPI plus LVDS via N5193A CC1 Documentation Source: N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN Maximum CW Power Warranted Temperature: 15 C to 40 C Remote Interface: LAN USB SCPI plus LVDS via N5193A CC1 Documentation Source: N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN Numeric rows from Keysight N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN Option 520/540 N5194A columns. Serial number note: sheet applies to units ending xx6006xxxx or greater unless otherwise noted.



MODEL

**Agilent / Keysight
N5194A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N5194A

LISTING

<https://aumictechlabs.com/products/n5194a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N5194A UXG X-Series Agile Vector Adapter is a signal generation instrument operating from 50 MHz to 40 GHz, designed for radar, electronic warfare, and aerospace testing. It generates complex modulated signals with high fidelity and enables rapid signal manipulation across demanding test environments. The adapter delivers agile amplitude control, wideband modulation, and coherent multi-source operation for realistic signal simulation and validation of complex system performance. Technical Specifications Frequency and Modulation Frequency

range: 50 MHz to 40 GHz Modulation bandwidth: Up to 1.6 GHz Agile amplitude range: 120 dB
Frequency, amplitude, and phase switching speed: 170 ns Typical update rate: < 500 ns Signal
purity: Typically -70 dBc in X-band Signal Generation Digital baseband generation: 2
Gsamples/second Pulse generation: Complex IQ-defined modulation with shaped rise/fall times, 90
dB on/off ratio, and wideband linear or non-linear chirps Coherency across multiple sources with
amplitude, phase, and time calibrationKey Features Multi-port configurations with rapid
adaptability for multiple channels IQ-defined modulation on pulsed signals for complex waveform
synthesis Antenna scan pattern and angle-of-arrival (AoA) scenario simulation Internal solid-state
attenuator Connector options: 3.5 mm (f) to 3.5 mm (f) for 20 GHz models; 2.4 mm (f) to 2.4 mm
(f) and 2.4 mm (f) to 2.9 mm (f) for 40 GHz modelsTypical Applications Radar signal simulation
and validation Electronic warfare (EW) signal environment generation Complex system
performance testing Signal realism and AoA simulationCompatibility & Integration Works with the
N5193A UXG Agile Signal Generator 40 GHz model (option 540) requires 20 GHz N5193A UXG for
full frequency range operation Compatible with N7660C Signal Studio software for AoA
simulations

N5194A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	UXG agile vector adapter
Series Family	Keysight N5194A/N5192A UXG vector adapter
Specified Frequency Range Option 5	50 MHz to 20 GHz
Tunable Frequency Range Option 5	10 MHz to 20 GHz
CW Frequency Resolution	0.001 Hz
Phase Offset	adjustable in 0.1 degree increments
External 6 GHz Reference Amplitude Nominal	plus 5 to plus 15 dBm
Update Rate Within Main Lower Band External LO Narrowband	250 ns spec (190 ns typical)
Update Rate Within Main Lower Band External LO Wideband	220 ns spec (170 ns typical)
Update Rate Between Main Lower and Main Upper Bands	7 us spec (4.3 us typical) external LO narrowband
Latency Within Main Lower Band External LO Narrowband Nominal	3 us
Max Specified Power Option 520 10 MHz to 14 GHz External LO	plus 3 dBm
Max Specified Power Option 520 18 to 20 GHz External LO	plus 1 dBm
Max Specified Power Option 540 20 to 35 GHz External LO	minus 2 dBm
Max Specified Power Option 540 35 to 40 GHz External LO	minus 5 dBm
Max Available Power Option 520 4 to 14 GHz External LO Typical	plus 10 dBm
Amplitude Settling 50 MHz to 40 GHz	within 1 dB of final amplitude
Phase Settling 10 MHz to 2.85 GHz	within 0.1 radians
Phase Settling Greater Than or Equal 17.3 GHz	within 0.4 radians

PARAMETER	VALUE
Required Companion	N5193A with SS2/SS4 and CC1; Option 540 needs only 20 GHz N5193A for full 40 GHz
Output Impedance	50 ohm nominal
Operating Temperature For Specs	0 C to 50 C after 1 hour warm-up
Maximum CW Power Warranted Temperature	15 C to 40 C
Remote Interface	LAN USB SCPI plus LVDS via N5193A CC1
Documentation Source	N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN
Operating temperature	For Specs: 0 C to 50 C after 1 hour warm-up

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	For Specs: 0 C to 50 C after 1 hour warm-up
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Documentation Source	N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN Notes Numeric rows from Keysight N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN Option 520/540 N5194A columns. Serial number note: sheet applies to units ending xx6006xxxx or greater unless otherwise noted.

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
Instrument Type	UXG agile vector adapter
Series Family	Keysight N5194A/N5192A UXG vector adapter
Specified Frequency Range Option 520	50 MHz to 20 GHz
Tunable Frequency Range Option 520	10 MHz to 20 GHz
Specified Frequency Range Option 540	50 MHz to 40 GHz
Tunable Frequency Range Option 540	10 MHz to 44 GHz
CW Frequency Resolution	0.001 Hz
Phase Offset	adjustable in 0.1 degree increments
External 6 GHz Reference Amplitude Nominal	plus 5 to plus 15 dBm
Update Rate Within Main Lower Band External LO Narrowband: 250 ns spec (190 ns typical) Update Rate Within Main Lower Band External LO Wideband: 220 ns spec (170 ns typical) Update Rate Between Main Lower and Main Upper Bands: 7 us spec (4.3 us typical) external LO narrowband Latency Within Main Lower Band External LO Narrowband Nominal: 3 us Max Specified Power Option 520 10 MHz to 14 GHz External LO: plus 3 dBm Max Specified Power Option 520 18 to 20 GHz External LO: plus 1 dBm Max Specified Power Option 540 20 to 35 GHz External LO: minus 2 dBm Max Specified Power Option 540 35 to 40 GHz External LO: minus 5 dBm Max Available Power Option 520 4 to 14 GHz External LO Typical: plus 10 dBm Amplitude Settling 50 MHz to 40 GHz: within 1 dB of final amplitude Phase Settling 10 MHz to 2.85 GHz: within 0.1 radians Phase Settling Greater Than or Equal 17.3 GHz: within 0.4 radians	
Specifications	
PARAMETER	VALUE
Required Companion	N5193A with SS2/SS4 and CC1; Option 540 needs only 20 GHz N5193A for full 40 GHz
Output Impedance	50 ohm nominal
Operating Temperature For Specs	0 C to 50 C after 1 hour warm-up
Maximum CW Power Warranted Temperature	15 C to 40 C
Remote Interface	LAN USB SCPI plus LVDS via N5193A CC1
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Notes

Numeric rows from Keysight N5194A and N5192A UXG Agile Vector Adapter data sheet 5992-2228EN Option 520/540 N5194A columns. Serial number note: sheet applies to units ending xx6006xxxx or greater unless otherwise noted.

Ordering Information

OPTION	DESCRIPTION
Option 540	40 GHz adapter driven by a 20 GHz N5193A
Option 520	10 MHz to 14 GHz External LO: plus 3 dBm

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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NIST-traceable calibration · SAM registered ·
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.