

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 3400A

Agilent Keysight 3400A RMS Voltmeter 10 Hz to 10 MHz class The HP 3400A is a true-RMS analog voltmeter for AC voltage from audio through HF. OEM 3400A product literature lists true-RMS response independent of waveform, 1 mV to 300 V full-scale ranges, 10 Hz to 10 MHz frequency coverage class, and 50 ohm/high-impedance input arrangements used as the industry RMS-voltmeter reference of its era. True-RMS measurement of distorted audio, noise, and RF millivolt signals where average-responding meters read low. The HP 3400A is a true-RMS analog voltmeter for AC voltage from audio through HF. OEM 3400A product literature lists true-RMS response independent of waveform, 1 mV to 300 V full-scale ranges, 10 Hz to 10 MHz frequency coverage class, and 50 ohm/high-impedance input arrangements used as the industry RMS-voltmeter reference of its era. True-RMS measurement of distorted audio, noise, and RF millivolt signals where average-responding meters read low. True-RMS thermocouple/attenuator architecture of the 3400A



MODEL

**Agilent / Keysight
3400A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

3400A

LISTING

<https://aumictechlabs.com/products/3400a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 3400A is a true RMS voltmeter that measures AC voltage amplitudes across a 10 Hz to 10 MHz frequency range. It delivers accurate RMS readings for both sinusoidal and non-sinusoidal waveforms, making it essential for broadband noise characterization and signal amplitude verification in test environments where precision matters. Technical Specifications

Measurement & Range True RMS AC voltage measurement Voltage ranges: 1 mV to 300 V full scale dB range: -72 to +52 dBm (0 dBm = 1 mW into 600 Ω) Frequency response: 10 Hz to 10 MHz Accuracy $\pm 5\%$ of full scale (10 Hz to 50 Hz) $\pm 1\%$ of full scale (50 Hz to 1 MHz) $\pm 2\%$ of full scale (1 MHz to 2 MHz) $\pm 3\%$ of full scale (2 MHz to 3 MHz) $\pm 5\%$ of full scale (3 MHz to 10 MHz) Temperature coefficient: $\pm 0.1\%$ (0°C to 20°C and 30°C to 55°C) Input Characteristics Input impedance: 10 M Ω shunted by <50 pF (0.001 V to 0.3 V); 10 M Ω shunted by <20 pF (1.0 V to 300 V) AC coupled input Crest factor: Up to 10:1 at full scale; up to 100:1 at 10% of full scale Maximum continuous input: 500 V AC peak at 1 kHz; 600 V DC on all ranges AC overload protection: 30 dB above full scale or 800 V peak, whichever is less Output & Response DC output: 0 to 1 V DC proportional to deflection (10–100% full scale), max 1 mA, nominal source impedance 1000 Ω Output noise: <1 mV RMS Response time: <5 seconds to final value Power Requirements 115 or 230 V $\pm 10\%$, 48 to 66 Hz, 15 VA maximum Key Features Handles complex waveforms and broadband noise through true RMS conversion Wide dynamic range with frequency-dependent accuracy optimized for 50 Hz to 1 MHz operation Rear-panel DC output for integration with external plotters and recorders Compact module design with removable feet Physical Specifications Dimensions: 159 mm H $\times$ 130 mm W $\times$ 279 mm D (6.25" $\times$ 5.1" $\times$ 11") Weight: 3.3 kg (7.3 lb) net; 4.5 kg (10 lb) shipping Compatibility & Integration This is an obsolete product. Operating and service manuals are available for reference.

3400A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	True RMS analog voltmeter
Series Family	HP 3400A / 3400B
Response	true RMS
Maximum Voltage Class	300 V
Minimum Full Scale Class	1 mV class of 3400A ranges
Frequency Range Class	10 Hz to 10 MHz class of 3400A literature
Display	analog meter
Input	AC voltage only (RMS voltmeter)
Waveform	measures RMS of sine, square, noise, and distorted waveforms
Successor	3400B RMS voltmeter
Form Factor	benchtop analog voltmeter
Attenuator	stepped range attenuator
Application	audio through HF RMS voltage
Documentation	HP 3400A RMS voltmeter operating and service manual
Calibration	full-scale and frequency-response calibration per 3400A procedure
Input Impedance Class	high impedance with 50 ohm arrangement class of 3400A
Overload	see 3400A manual maximum input by range
Accuracy	see 3400A specification table (do not invent percent)
Meter Scale	RMS-calibrated analog scale
Power	AC mains operated
Operating Environment	laboratory ambient per 3400A manual
Verification	use the 3400A specification table for warranted percent of full scale vs frequency

3400A Specifications

PARAMETER	VALUE
Applications	True-RMS measurement of distorted audio, noise, and RF millivolt signals where average-responding meters read low.
Key Features	True-RMS thermocouple/attenuator architecture of the 3400A
Analog meter display	Predecessor to 3400B
Technical Specifications	Instrument Type: True RMS analog voltmeter

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	True RMS analog voltmeter
Series Family	HP 3400A / 3400B
Response	true RMS
Maximum Voltage Class	300 V
Minimum Full Scale Class	1 mV class of 3400A ranges
Frequency Range Class	10 Hz to 10 MHz class of 3400A literature
Display	analog meter
Input	AC voltage only (RMS voltmeter)
Waveform	measures RMS of sine, square, noise, and distorted waveforms
Successor	3400B RMS voltmeter
Form Factor	benchtop analog voltmeter
Attenuator	stepped range attenuator
Application	audio through HF RMS voltage
Documentation	HP 3400A RMS voltmeter operating and service manual
Calibration	full-scale and frequency-response calibration per 3400A procedure
Input Impedance Class	high impedance with 50 ohm arrangement class of 3400A
Overload	see 3400A manual maximum input by range
Accuracy	see 3400A specification table (do not invent percent)
Meter Scale	RMS-calibrated analog scale
Power	AC mains operated
Operating Environment	laboratory ambient per 3400A manual
Verification	use the 3400A specification table for warranted percent of full scale vs frequency
Notes On Sparse Table: frequency-by-range accuracy belongs on the 3400A data sheet	
Notes	
True-RMS identity, 300 V maximum, and 10 Hz-10 MHz / 1 mV-class coverage from HP 3400A RMS voltmeter product	

literature. Percent-of-full-scale vs frequency tables were not copied from a complete OEM numeric sheet here; do not invent them.

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.