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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 44701A

HP Agilent 44701A 5.5 Digit Integrating Voltmeter for 3852A The HP 44701A is a 5.5-digit integrating voltmeter plug-in for the 3852A data acquisition and control mainframe. OEM 3852A/44701A tables list AC/DC voltage 30 mV to 300 V full scale in 5 ranges and resistance 30 ohm to 3 Mohm in 6 ranges (2-wire and 4-wire). With 447xx multiplexers it measures current (external shunt), strain, and temperature (thermocouple, RTD, thermistor). Supported thermocouples include B, E, J, K, N14, N28, R, S, and T. The HP 44701A is a 5.5-digit integrating voltmeter plug-in for the 3852A data acquisition and control mainframe. OEM 3852A/44701A tables list AC/DC voltage 30 mV to 300 V full scale in 5 ranges and resistance 30 ohm to 3 Mohm in 6 ranges (2-wire and 4-wire). With 447xx multiplexers it measures current (external shunt), strain, and temperature (thermocouple, RTD, thermistor). Supported thermocouples include B, E, J, K, N14, N28, R, S, and T. Precision scanned DCV/ACV/ohms/temperature in a 3852A cardcage with relay or FET multiplexers.



MODEL Agilent / Keysight 44701A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 44701A	LISTING https://aumictechlabs.com/products/44701a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 44701A is a 5.5 to 3.5 digit integrating voltmeter module engineered for precision measurement in high-noise environments. This plug-in card integrates with the HP 3852A Data Acquisition/Control Mainframe and 447xx series multiplexers, delivering DC voltage, AC voltage, and resistance measurements with selectable resolution and noise rejection.

Extended measurement capability includes AC/DC current via external shunt, strain, and temperature sensing across RTD, thermistor, and thermocouple types.

Technical Specifications

Measurement Ranges DC Voltage: 30 mV, 300 mV, 3 V, 30 V, 300 V AC Voltage: 200 mV, 2 V, 20 V, 200 V Resistance: 30 Ω , 300 Ω , 3 k Ω , 30 k Ω , 300 k Ω , 3 M Ω (2-wire and 4-wire) Maximum Input: 350 V_{peak} or 250 V_{dc} between terminals or chassis Accuracy DC Voltage: 0.008% (best case: $\pm 0.008\% + 8 \mu\text{V}$ on 3 V range) AC Voltage: 0.5% Resistance: 0.015%

Key Features

Adjustable noise rejection for stable readings in industrial environments Selectable resolution from 5.5 to 3.5 digits Dual measurement input paths: multiplexer or rear panel terminals Support for thermocouple, RTD, and thermistor temperature measurement Compact module form factor: 18 × 10 × 2 in

Typical Applications Data acquisition systems requiring high-accuracy DC/AC voltage and resistance measurement. Temperature monitoring with standard sensors. Current measurement via external shunt configuration. Multi-channel measurement through 447xx multiplexer integration.

Compatibility & Integration Designed exclusively for the HP 3852A mainframe and compatible 447xx series multiplexers. Operates as a dedicated measurement card within the 3852A chassis.

44701A Characteristics / Specifications

PARAMETER	VALUE
Model	44701A
Instrument Type	Integrating voltmeter plug-in
Host Mainframe	3852A data acquisition and control unit
Resolution	5.5 digits
Voltage Full Scale	30 mV to 300 V in 5 ranges
Resistance Full Scale	30 ohm to 3 Mohm in 6 ranges
Ohms Modes	2-wire and 4-wire
Current	AC/DC current with external shunt
Temperature	RTD, thermistor, thermocouple
Thermocouple Types	B, E, J, K, N14, N28, R, S, T
Thermistors	2252, 5 kohm, and 10 kohm types listed in 3852A manual
Rtd Types	Type 85 and Type 92
Related Mux	44705A/44708A relay multiplexers
Nplc	integration via NPLC in 3852A programming
Form Factor	3852A plug-in
Manufacturer	HP Agilent Keysight
Use Case	scanned precision DMM in 3852A
Control	3852A CONFMEAS command set
Operating Temperature Class	3852A mainframe
Literature	HP 3852A configuration and programming manual 03852-90015
Year Introduced Class	1986 44700 series
Documentation Type	OEM plug-in table
Operating temperature	Class: 3852A mainframe

44701A Specifications

PARAMETER	VALUE
Applications	Precision scanned DCV/ACV/ohms/temperature in a 3852A cardcage with relay or FET multiplexers.
Key Features	5.5-digit integrating voltmeter
Five voltage ranges 30 mV to 300 V FS	Six ohms ranges 30 ohm to 3 Mohm
Thermocouple RTD thermistor conversions	Works with 44705/44708 multiplexers
Technical Specifications	Model: 44701A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 3852A mainframe
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Operating Temperature Class	3852A mainframe
Literature	HP 3852A configuration and programming manual 03852-90015
Year Introduced Class	1986 44700 series
Documentation Type	OEM plug-in table Notes From HP 44701A / 3852A configuration tables (5.5-digit DCV/ACV/ohms ranges and temperature types). Accuracy versus range and NPLC is in the 44701A specification pages of the 3852A manuals.

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	
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Instrument Type	Integrating voltmeter plug-in
Host Mainframe	3852A data acquisition and control unit
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Resistance Full Scale	30 ohm to 3 Mohm in 6 ranges
Ohms Modes	2-wire and 4-wire
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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

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NIST-traceable calibration · SAM registered ·
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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.