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Data Sheet

August 14, 2026

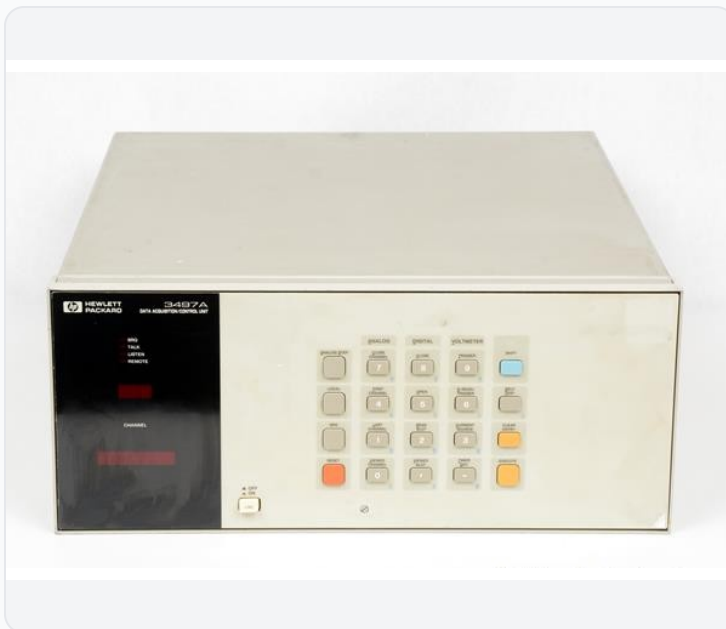
AGILENT / KEYSIGHT

Agilent/Keysight 3497A

Agilent Keysight 3497A Data Acquisition and Control Unit The HP 3497A is a modular data-acquisition/control mainframe with an internal 5.5-digit DVM and plug-in relay/DIO/DAC assemblies. OEM 3497A literature lists 1000-reading buffer class, HP-IB control, thermocouple/RTD scanning with appropriate assemblies, and a card cage for analog and digital I/O used widely in 1980s ATE. Automated temperature, voltage, and digital I/O scanning in production test and facility monitoring. Thermocouple scanning with compensation assemblies

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Instrument Type: Data acquisition and control mainframe



MODEL

**Agilent / Keysight
3497A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

3497A

LISTING

<https://aumictechlabs.com/products/3497a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 3497A is a modular data acquisition unit built around a 5.5-digit integrating digital voltmeter with integrated current source for four-terminal resistance measurements. The mainframe accommodates one DVM assembly and up to five plug-in modules, enabling flexible configuration for multi-channel automated testing and data logging across DC/AC voltage,

current, resistance, temperature, and frequency measurements. Technical Specifications

Mainframe Architecture Accommodates one DVM assembly and up to five plug-in assemblies

DVM resolution: 5.5-digit integrating voltmeter

Programmable current source for four-wire resistance measurement

Reading rate: up to 600 readings per second (single channel); up to 250 channels per second (scan mode)

Memory capacity: 50,000 time-stamped readings with overflow indication

Electrical Operating power: 110 V, 120 V, 220 V, or 240 V $\pm 10\%$, 48–66 Hz, 150 VA

Protective earth terminals provided

Key Features Microvolt-level signal resolution suitable for thermocouple and strain gauge transducers

System accuracy combines individual error terms from DVM, current source, and acquisition assembly

HP-IB interface for ATE system integration and instrument control

Plug-in module support includes relay multiplexers (with optional thermocouple compensation), FET multiplexers, digital input/interrupt modules, counters, strain gage/bridge completion assemblies, programmable voltage and current D/A converters, actuators, and breadboard assemblies

Measurement Capabilities Voltage (AC and DC) Current (AC and DC) Resistance (2-wire and 4-wire) Temperature (thermocouples, RTDs, thermistors) Frequency and period

Compatibility & Integration The 3497A integrates with automated test equipment via HP-IB communication. Optional strain gage conditioner assemblies are available for 120 Ω (Option 070) and 350 Ω (Option 071) bridges. System accuracy specifications account for combined contributions from all active measurement circuit elements.

3497A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Data acquisition and control mainframe
Series Family	HP 3497A
Internal Dvm Digits	5.5-digit class internal DVM
Buffer Class	1000-reading storage class of 3497A literature
Remote Interface	HP-IB
Architecture	modular plug-in analog and digital assemblies
Scanning	relay multiplexer scanning of analog channels
Actuators	digital output/actuator assemblies
Temperature	thermocouple and RTD with appropriate plugins
Form Factor	rack mainframe cardcage
Application	ATE data acquisition and control
Documentation	HP 3497A data acquisition/control unit operating literature
Clock	real-time clock/timer class for paced scans
Triggers	scan trigger in/out class
Dvm Functions	DCV and ratio class of the internal voltmeter
Plugin Examples	44421A/44422A multiplexer class assemblies (confirm installed cards)
Power	AC mains operated mainframe
Operating Environment	laboratory/rack ambient per 3497A manual
Isolation	channel-to-channel isolation depends on installed relay cards
Successor Class	34970A/34980A data acquisition families
Verification	DVM accuracy and channel counts are on the installed-assembly specification sheets

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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Notes On Cards: do not invent multiplexer channel counts; read the assembly option label	
Systems Language: HP-IB program memory class of 3497A	
Notes	
Mainframe-plus-internal-5.5-digit-DVM and HP-IB DAQ identity from HP 3497A literature. Channel-count and DVM accuracy numbers depend on installed plug-in assemblies and the 3497A DVM specification table.	

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