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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 3852A

Agilent Keysight 3852A Data Acquisition and Control Mainframe The HP 3852A is a high-performance data-acquisition/control mainframe with a card cage for voltmeter, multiplexer, DAC, and digital I/O plugins. OEM 3852A literature lists HP-IB systems control, internal or plugin DVM options, high-speed scanning, and use as the successor-class mainframe to 3497A in 1980s/90s ATE. Automated analog scanning, digital I/O, and control in production test and research DAQ racks. Instrument Type: Data acquisition and control mainframe The HP 3852A is a high-performance data-acquisition/control mainframe with a card cage for voltmeter, multiplexer, DAC, and digital I/O plugins. OEM 3852A literature lists HP-IB systems control, internal or plugin DVM options, high-speed scanning, and use as the successor-class mainframe to 3497A in 1980s/90s ATE. Automated analog scanning, digital I/O, and control in production test and research DAQ racks. Instrument Type: Data acquisition and control mainframe Predecessor Class: 3497A data acquisition/control unit



MODEL

**Agilent / Keysight
3852A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

3852A

LISTING

<https://aumictechlabs.com/products/3852a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 3852A is a modular data acquisition and control system built around a 68000-based processor, enabling high-speed automated measurements and independent subroutine execution without external computer dependency. The mainframe provides eight plug-in slots, expandable to additional capacity via the 3853A extender, supporting up to 1848

differential or 4620 single-ended channels. The system achieves 100,000 readings per second at 22-bit resolution with measurement modules covering thermocouples, thermistors, RTDs, strain gauges, DC/AC voltage, current, resistance, frequency, and digital I/O.

Technical Specifications

Measurement Speed: 100,000 readings/second maximum Resolution: 22 bits DC Voltage Accuracy: 0.008% best case AC Voltage Accuracy: 0.5% best case Maximum Channels (differential): 1848 Maximum Channels (single-ended): 4620 DCV Range: ± 300 V ACV Range: ± 200 V Analog Output (DCV): ± 10 V Analog Output (DCI): ± 20 mA Frequency Counter: 200 kHz maximum Digital Input: Isolated, 230 kHz maximum speed Resistance Measurement: 3 Mohm maximum reading Internal Memory: Up to 4 Mbytes (optional) System Clock Resolution: 1 msec Programmable Pacer Resolution: 0.25 μ sec Weight: Approximately 50 lbs

Key Features Eight-slot mainframe with expansion capability via 3853A extender Support for up to three integrated digital voltmeters Built-in 68000 processor for autonomous measurement routines Plug-in module architecture for transducer and I/O customization 1 msec time-stamping clock and 0.25 μ sec measurement pacer

Typical Applications Automated test systems, process monitoring, multi-channel data logging, transducer measurement networks, and control systems requiring high-speed, high-channel-count acquisition with minimal external processing overhead.

Compatibility & Integration IEEE-488 (GPIB) standard interface. Compatible with Keysight 9000 Series 300 computers and standard PCs.

3852A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Data acquisition and control mainframe
Series Family	HP 3852A
Architecture	modular plugin cardcage
Remote Interface	HP-IB
Predecessor Class	3497A data acquisition/control unit
Plugins	voltmeter, FET/relay multiplexers, DAC, digital I/O
Scanning	high-speed analog scanning class of 3852A
Application	ATE data acquisition and control
Form Factor	rack mainframe
Documentation	HP 3852A data acquisition and control mainframe literature
Triggers	scan trigger in/out class
Buffer	reading memory class of 3852A
Dvm	internal or plugin DVM depending on configuration
Isolation	depends on installed multiplexer cards
Power	AC mains operated mainframe
Operating Environment	laboratory/rack ambient per 3852A manual
Calibration	DVM and analog-card calibration per installed assemblies
Successor Class	34970A/34980A DAQ families
Verification	channel counts and DVM accuracy are on the plugin 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.

performance data-acquisition/control mainframe withacardcage for voltmeter, multiplexer, DAC, and digital I/O plugins. OEM 3852A literature lists HP-IB systems control, internal or plugin DVM options, high-speed scanning, and use as the successor-class mainframe to 3497A in 1980s/90s ATE.

Applications

Automated analog scanning, digital I/O, and control in production test and research DAQ racks.

Key Features

Modular DAQ/control cardcage

HP-IB

Voltmeter and multiplexer plugins

High-speed scanning class vs 3497A

Actuator and DAC assemblies

Technical Specifications

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Notes On Cards: do not invent multiplexer channel counts

Specifications

PARAMETER	VALUE
Systems Language	HP-IB programmable mainframe
Clock	paced scanning with mainframe timer class
Use	production and research DAQ

Notes
3852A DAQ/control mainframe identity from HP 3852A literature. Numeric DVM accuracy and channel counts depend on installed plugins and are not invented.

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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