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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 54657A GPIB Measurement Storage Module

Agilent 54657A Measurement Storage Module GPIB The Agilent 54657A Measurement/Storage Module adds GPIB connectivity plus extended automatic measurements, waveform math/FFT, mask testing, and nonvolatile trace storage to Agilent 54600-Series oscilloscopes. OEM user guide 54657-97019 lists three uncompressed nonvolatile traces plus additional compressed memory for up to 97 more traces. 54600-Series scope automation over GPIB, extended voltage/time measurements, FFT math, and unattended mask monitoring with stored traces. The Agilent 54657A Measurement/Storage Module adds GPIB connectivity plus extended automatic measurements, waveform math/FFT, mask testing, and nonvolatile trace storage to Agilent 54600-Series oscilloscopes. OEM user guide 54657-97019 lists three uncompressed nonvolatile traces plus additional compressed memory for up to 97 more traces. 54600-Series scope automation over GPIB, extended voltage/time measurements, FFT math, and unattended mask monitoring with stored traces. Additional automatic voltage and time measurements



MODEL

**HP / Agilent
54657A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

54657A

LISTING

<https://aumictechlabs.com/products/54657a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 54657A GPIB Measurement Storage Module expands the measurement and data storage capabilities of Agilent 54600-series oscilloscopes. This interface module integrates

advanced signal analysis, automated measurement functions, nonvolatile trace memory, and remote GPIB programmability to enable unattended waveform monitoring and mask-based automated testing. Technical Specifications Measurement Functions FFT analysis for frequency-domain signal characterization Five automatic measurements: amplitude, preshoot, overshoot, delay, and phase angle User-defined measurement thresholds at 10%/90%, 20%/80%, or custom voltage levels Two additional cursor measurement sources via math functions 1 and 2 Waveform Processing Supports addition, subtraction, multiplication, differentiation, integration, and FFT mathematical operations on acquired signals. Data Storage and Management Up to 100 traces in nonvolatile memory: three uncompressed trace memories plus 64 KB of compressed nonvolatile storage accommodating up to 97 additional traces. Each stored trace includes time and date tagging for traceability. Unattended Monitoring Automask feature generates mask templates from waveform data with variable tolerance settings. Pixel-by-pixel mask editing and line-drawing tools enable precise mask definition. Out-of-limit trace storage and failure zone indication identify signal violations against the mask template. Interfaces and Control GPIB connectivity enables full remote programming and unattended oscilloscope operation. Hardcopy output functionality and integrated real-time clock support comprehensive data documentation. Key Features Compact form factor for instrument rack integration Automatic mask generation and manual editing capabilities Out-of-limit trace capture for failure analysis Time and date stamping of waveform records Three independent nonvolatile trace storage banks Typical Applications Automated compliance testing with mask-based pass/fail criteria Unattended signal monitoring and anomaly capture Frequency-domain analysis via FFT on stored waveforms Remote oscilloscope operation via GPIB from external test systems Compatibility & Integration Compatible with all Agilent 54600-series oscilloscopes except 54600A, 54601A, and 54602A models running operating system versions below 2.2. Part of the Agilent 54600 Series Interface Modules family.

54657A Characteristics / Specifications

PARAMETER	VALUE
Model	54657A
Interface	GPIB HP-IB
Compatible Scopes	Agilent 54600 Series except early OS on 54600A/54601A/54602A below 2.2
Additional Voltage Measurements	amplitude, preshoot, overshoot
Additional Time Measurements	delay and phase angle
Measurement Thresholds	10/90 percent, 20/80 percent, or selected voltage levels
Additional Cursor Measurements	voltage in percent and time in degrees
Waveform Math Functions	addition subtraction multiplication differentiation integration FFT
Uncompressed Nonvolatile Trace Memories	3
Additional Compressed Trace Memory	64K for up to 97 more traces
Time And Date Tagging	yes for hard copy and nonvolatile memories
GPIB Cable Examples	10833A 1 m, 10833B 2 m, 10833C 4 m, 10833D 0.5 m
Module Type	Measurement/Storage plug-in module
FFT Measurement	yes
Mask Testing	Automask Autostore line-segment editing supported
Unattended Waveform Monitoring	yes
Printer Plotter Computer Link	via GPIB
Series Family	54657A/54658A/54659B Measurement Storage Modules
Form Factor	rear/module attachment for 54600 Series
OS Update Kit Class	54601-68702 for early 54600A/54601A/54602A
Brand Lineage	HP / Agilent / Keysight
Nonvolatile Memory Type	trace storage with compression support

54657A Specifications

PARAMETER	VALUE
Agilent 54657A Measurement Storage Module GPIB	Overview
Applications	54600-Series scope automation over GPIB, extended voltage/time measurements, FFT math, and unattended mask monitoring with stored traces.
Key Features	GPIB interface for 54600-Series scopes
Three uncompressed nonvolatile trace memories	Additional compressed nonvolatile memory for up to 97 traces
Technical Specifications	Model: 54657A
Notes	From Agilent 54657A/54658A/54659B Measurement/Storage Modules User Guide (54657-97019) feature and interface tables for 54657A.

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

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Notes

From Agilent 54657A/54658A/54659B Measurement/Storage Modules User Guide (54657-97019) feature and interface tables for 54657A.

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 ·
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.