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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 16556A

HP Agilent 16556A 68 Channel 100 MHz State 400 MHz Timing 1M Module The HP 16556A is a 1M-deep logic-analyzer card for 16500B. OEM 16500 system data list 68 channels, 100 MHz state / 400 MHz timing, 1M samples per channel, expandable to 340 channels. Deep 100 MHz state and 400 MHz timing in 16500B systems. Expansion Frame: 16501A five additional slots The HP 16556A is a 1M-deep logic-analyzer card for 16500B. OEM 16500 system data list 68 channels, 100 MHz state / 400 MHz timing, 1M samples per channel, expandable to 340 channels. Deep 100 MHz state and 400 MHz timing in 16500B systems. Expansion Frame: 16501A five additional slots Sibling 16554A: 70 MHz state / 250 MHz timing 512K



MODEL

**Agilent / Keysight
16556A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

16556A

LISTING

[https://aumictechlabs.c
om/products/16556a-2/](https://aumictechlabs.com/products/16556a-2/)

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SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 16556A is a 68-channel logic analyzer module that extends the capabilities of compatible mainframes for advanced digital system debugging and validation. This module delivers 1 Megasample per channel memory depth with dual clocking modes - state analysis at 100 MHz and timing analysis up to 500 MHz (2 ns resolution) - enabling simultaneous, time-correlated acquisition across mixed signal types. The instrument supports up to 2048 levels of sequence triggering and real-time pattern recognition, making it suitable for complex digital circuit characterization. Technical Specifications Channels: 68 across 4 groups (up to 18 channels per group) Memory: 1 Megasample per channel State Clock Rate: 100 MHz maximum Timing Sampling

Rate: 500 MHz maximum (2 ns resolution); 200 MHz full channel, 400 MHz half-channel conventional timing Threshold Range: -6 V to +6 V, adjustable in 50 mV increments Input Impedance: 100 k Ω || 8 pF Voltage Range: -10 V to +10 V Sequence Triggering: Up to 2048 levels Power: 100–240 V AC, 50–60 Hz Operating Temperature: 0°C to +50°C Dimensions: 180 mm H $\times$ 425 mm W $\times$ 490 mm D Weight: ~12 kg

Key Features Flexible state and timing clocking modes on all channels simultaneously Full time-correlation between state and timing measurements Real-time pattern and sequence recognition across all 68 channels Adjustable input thresholds for mixed-voltage system analysis HP-IB (GPIB) remote control and data transfer interface Internal storage with external memory device support

Typical Applications Digital design debugging and verification Complex digital circuit troubleshooting Electronic circuit validation

Compatibility & Integration Compatible with Agilent/Keysight 16700 Series and 16500C logic analysis systems. The 16700 Series requires software version A.02.70.

16556A Characteristics / Specifications

PARAMETER	VALUE
Model	16556A
Instrument Type	Logic analyzer module
Host Mainframe	HP 16500B
Channel Count	68
State Rate	100 MHz
Timing Rate	400 MHz
Memory Depth	1M samples per channel
Max System Channels	340 when expanded
Expansion Frame	16501A five additional slots
Cable Type	four shielded 40-pin cables
Sibling 16554A	70 MHz state / 250 MHz timing 512K
Sibling 16555A	110 MHz state / 500 MHz timing 1M
Manufacturer	HP Agilent Keysight
Mechanical Package	16500B plug-in module
Probe Compatibility	40-pin IDC 1650-series cables
Analysis Modes	state and timing
Mainframe Slots	16500B five slots
System Family	HP 16500 modular logic analysis
Deep Memory Class	1M versus 4K on 16550A
Minimum State Clock	100 MHz maximum state as published
Maximum Timing Clock	400 MHz
Card Pairing	expand per 16500B configuration guide

16556A Specifications

PARAMETER	VALUE
Applications	Deep 100 MHz state and 400 MHz timing in 16500B systems.
Key Features	68 channels 1M deep
Four shielded pod cables	16500B plug-in
Technical Specifications	Model: 16556A

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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Card Pairing	expand per 16500B configuration guide
Notes	
From HP 16500B modular logic analysis system data sheet 16556A row. 16557D isalater related card; use the 16556A faceplate to confirm memory depth.	

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.