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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP 16710A 100 MHz State / 500 MHz Timing Module

HP 16710A 102 Channel 100 MHz State / 500 MHz Timing Module The HP/Agilent 16710A is a 102-channel state/timing module for 16700-series logic-analysis mainframes. State clock 100 MHz; conventional timing 250 MHz full-channel / 500 MHz half-channel; transitional timing 125 MHz. Memory 8 k full / 16 k half-channel. Siblings 16711A 32/64 k and 16712A 128/256 k. Trigger: 10 patterns, 2 ranges, 2 edge/glitch, 2 timers; 12 sequence levels in state, 10 in timing; 125 MHz max sequence. Setup/hold 4.0 ns window adjustable 4.0/0 to 0/4.0 ns in 500 ps steps per 34 channels. Thresholds TTL, ECL, or user plus/minus 6.0 V in 50 mV steps. Six state clocks/qualifiers. Max 204 channels on one timebase with two cards; 1020 channels inasystem. The HP/Agilent 16710A is a 102-channel state/timing module for 16700-series logic-analysis mainframes. State clock 100 MHz; conventional timing 250 MHz full-channel / 500 MHz half-channel; transitional timing 125 MHz. Memory 8 k full / 16 k half-channel. Siblings 16711A 32/64 k and 16712A 128/256 k. Trigger: 10 patterns, 2 ranges, 2 edge/glitch, 2 timers; 12 sequence levels in state, 10 in timing; 125 MHz max sequence. Setup/hold 4.0 ns window adjustable 4.0/0 to 0/4.0 ns in 500 ps steps per 34 channels. Thresholds TTL, ECL, or user plus/minus 6.0 V in 50 mV steps. Six state clocks/qualifiers. Max 204 channels on one timebase with two cards; 1020 channels



MODEL

**Keysight / Agilent /
HP 16710A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

16710A

LISTING

[https://aumictechlabs.c
om/products/16710a-2/](https://aumictechlabs.com/products/16710a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight/Agilent/HP 16710A is a dual-mode logic analyzer module for the 16700-series systems, delivering synchronized state and timing analysis in a single instrument. Operating at 100 MHz for state analysis and 500 MHz for timing measurements, it captures up to 204 channels at 8K memory depth per channel. The module performs synchronous sampling via state clock, asynchronous high-speed transition detection, and transitional timing mode to optimize memory utilization. Advanced trigger macros isolate critical events without probe relocation. All channels function independently in either state or timing mode, enabling fully time-correlated cross-domain measurements across different signal groups simultaneously.

Technical Specifications

State clock rate: 100 MHz
Timing analysis rate: 500 MHz
Memory depth: 8K per channel
Channel capacity: Up to 204 channels, 8K deep
Power consumption: 1/3 A at 5 V maximum per cable
Operating temperature: 0 °C to 55 °C
Probe lead and cable temperature: 0 °C to 65 °C
Humidity: Up to 95% RH at 40 °C
Maximum altitude: 4600 m

Key Features

State analysis: Synchronous sampling locked to design clock
Timing analysis: Asynchronous capture of signal transitions
Transitional timing: Records state changes only, preserving memory
Time correlation: Simultaneous state and timing on separate channels with full temporal alignment
No probe swapping required between analysis modes
Advanced trigger macros for complex event capture

Typical Applications

Digital circuit and system debugging
Design validation and verification
High-speed signal transition analysis
Cross-domain timing correlation measurements

Compatibility & Integration

Installs in Agilent/HP 16700-series mainframes as single- or double-slot module. Requires operating system version A.01.20.00 or higher; version A.02.70 supported.

16710A Characteristics / Specifications

PARAMETER	VALUE
Model	16710A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	State and timing analyzer module
Series	16710 / 16700
Alias	16710A; HP 16710A
Channels Per Module	102
Max Channels One Timebase	204 (two cards)
Max Channels System	1020
State Clock	100 MHz
Timing Full Channel	250 MHz
Timing Half Channel	500 MHz
Transitional Timing	125 MHz
Memory Full	8 k
Memory Half	16 k
Related 16711A Memory	32 k / 64 k
Related 16712A Memory	128 k / 256 k
State Sequence Levels	12
Timing Sequence Levels	10
Sequence Speed	125 MHz
Patterns	10
Ranges	2
Edge Glitch	2
Timers	2
State Clocks	6
Setup Hold Window	4.0 ns

PARAMETER	VALUE
Setup Hold Adjust	4.0/0 ns to 0/4.0 ns in 500 ps
Threshold	TTL, ECL, user plus/minus 6.0 V
Threshold Step	50 mV
Host	16700-series mainframes
Form	16700 plugin
Status	HP 16710A
Probe	16700-family pod cables
Duty	continuous in 16700 Notes Specs from Agilent 16710A/16711A/16712A state/timing module table (102 ch, 100 MHz state, 250/500 MHz timing, 8/16 k). Confirm 16710A versus 16711A/16712A memory option.

16710A Specifications

PARAMETER	VALUE
Applications	100 MHz state / 500 MHz timing on 16700 frames
Key Features	102 channels per module
Technical Specifications	Model: 16710A

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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PARAMETER	VALUE
Model	16710A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	State and timing analyzer module
Specifications	
PARAMETER	VALUE
Series	16710 / 16700
Alias	16710A; HP 16710A
Channels Per Module	102
Specifications	
PARAMETER	VALUE
Max Channels One Timebase	204 (two cards)
Max Channels System	1020
State Clock	100 MHz
Specifications	
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Timing Full Channel	250 MHz
Timing Half Channel	500 MHz
Transitional Timing	125 MHz
Specifications	
PARAMETER	VALUE
Memory Full	8 k
Memory Half	16 k
Related 16711A Memory	32 k / 64 k

Specifications

PARAMETER	VALUE
Related 16712A Memory	128 k / 256 k
State Sequence Levels	12
Timing Sequence Levels	10

Specifications

PARAMETER	VALUE
Sequence Speed	125 MHz
Patterns	10
Ranges	2

Specifications

PARAMETER	VALUE
Edge Glitch	2
Timers	2
State Clocks	6

Specifications

PARAMETER	VALUE
Setup Hold Window	4.0 ns
Setup Hold Adjust	4.0/0 ns to 0/4.0 ns in 500 ps
Threshold	TTL, ECL, user plus/minus 6.0 V

Specifications

PARAMETER	VALUE
Threshold Step	50 mV
Host	16700-series mainframes
Form	16700 plugin

Specifications

PARAMETER	VALUE
Status	HP 16710A
Probe	16700-family pod cables
Duty	continuous in 16700

Notes

Specs from Agilent 16710A/16711A/16712A state/timing module table (102 ch, 100 MHz state, 250/500 MHz timing, 8/16 k). Confirm 16710A versus 16711A/16712A memory option.

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
NAICS 423690 · 811210 · 541380
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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.