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Data Sheet

August 7, 2026

KEYSIGHT

Keysight (Agilent) 16801A 34-Channel Portable Logic Analyzer

Keysight (Agilent) 16801A 34-Channel Portable Logic Analyzer The Keysight/Agilent 16801A is a 34-channel portable logic analyzer in the 16800 Series. It provides 4 GHz timing zoom (64 K depth), up to 1.0 GHz / 500 MHz half/full-channel conventional timing, and state analysis to 250 MHz (Opt 250) with selectable deep memory. Fixed configuration with large color display; no built-in pattern generator (see 16821A for PG sibling). Embedded digital debug; FPGA/ASIC validation; bus timing and state analysis where 34 channels suffice. The Keysight/Agilent 16801A is a 34-channel portable logic analyzer in the 16800 Series. It provides 4 GHz timing zoom (64 K depth), up to 1.0 GHz / 500 MHz half/full-channel conventional timing, and state analysis to 250 MHz (Opt 250) with selectable deep memory. Fixed configuration with large color display; no built-in pattern generator (see 16821A for PG sibling). Embedded digital debug; FPGA/ASIC validation; bus timing and state analysis where 34 channels suffice.

No photo

MODEL

Keysight 16801A

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

16801A

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- Logic acquisition channels: 34 • Pattern generator: none (use 16821A for 34-ch + 48-ch PG) • Timing zoom: 4 GHz (250 ps) with 64 K depth • Conventional timing: 1.0 GHz / 500 MHz (half / full channel) • Transitional timing: 500 MHz • State clock rate: up to 250 MHz (Opt 250); data rates to 250 Mb/s class
- Memory depth options: 1 M (001), 4 M (004), 16 M (016), 32 M (032) • Threshold: adjustable -5 V to +5 V in 10 mV increments; single-ended signal support • Eye finder / automated threshold and sample-position setup • Simultaneous eye diagrams on all channels • Display: 15-inch color (touch optional) • Probe interface: 40-pin logic analyzer probes (ordered separately) • Power: 115/230 Vac $\pm 20\%$, 48–66 Hz, 615 W max (16801A class) • Weight: max net ~12.9 kg (28.5 lb); shipping ~19.7 kg

16801A Characteristics / Specifications

PARAMETER	VALUE
Model	16801A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Portable Logic Analyzer
Family	16800 Series
Alias	16801A; Agilent 16801A Digital Capture 34 ch; 4 GHz zoom; 1 GHz/500 MHz timing; 250 MHz state; to 32 M memory Operational Notes Prefer Agilent 16800 Series data sheet 5989-5062EN and service guide 16800-97004. Confirm installed memory/state options on the unit label.
Logic acquisition channels	34
Pattern generator	none (use 16821A for 34-ch + 48-ch PG)
Timing zoom	4 GHz (250 ps) with 64 K depth
Conventional timing	1.0 GHz / 500 MHz (half / full channel)
Transitional timing	500 MHz
State clock rate	up to 250 MHz (Opt 250); data rates to 250 Mb/s class
Memory depth options	1 M (001), 4 M (004), 16 M (016), 32 M (032)
Threshold	adjustable -5 V to +5 V in 10 mV increments; single-ended signal support
Display	15-inch color (touch optional)
Probe interface	40-pin logic analyzer probes (ordered separately)
Power	115/230 Vac $\pm 20\%$, 48-66 Hz, 615 W max (16801A class)
Weight	max net ~12.9 kg (28.5 lb); shipping ~19.7 kg

16801A Specifications

PARAMETER	VALUE
Applications	Embedded digital debug; FPGA/ASIC validation; bus timing and state analysis where 34 channels suffice.
Key Features	- Logic acquisition channels: 34
Technical Specifications	Model: 16801A
Digital Capture	34 ch; 4 GHz zoom; 1 GHz/500 MHz timing; 250 MHz state; to 32 M memory
Operational Notes	Prefer Agilent 16800 Series data sheet 5989-5062EN and service guide 16800-97004. Confirm installed memory/state options on the unit label.

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

PARAMETER	VALUE
Model	16801A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Portable Logic Analyzer
Family	16800 Series
Alias	16801A; Agilent 16801A

Digital Capture

34 ch; 4 GHz zoom; 1 GHz/500 MHz timing; 250 MHz state; to 32 M memory

Operational Notes

Prefer Agilent 16800 Series data sheet 5989-5062EN and service guide 16800-97004. Confirm installed memory/state options on the unit label.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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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.