


Aumictech

Test & measurement • bought, sold, repaired, calibrated

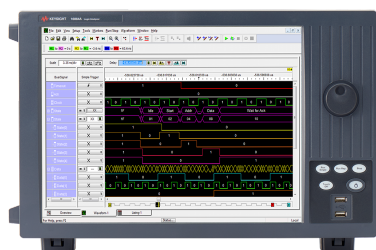
Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 16861A

Agilent Keysight 16861A Portable Logic Analyzer 34 Channel The Keysight 16861A is the 34-channel member of the 16860-series portable logic analyzers that succeeded the 16800 series. OEM 16860-series literature lists 34 channels on 16861A, 4 GHz-class timing zoom, GHz-class conventional timing, 350 MHz-class state with higher-rate options, and deep memory options from 1M class upward in the 16860 family (16861A/16862A/16863A/16864A channel ladder). Portable 34-channel state/timing debug of embedded and FPGA designs in the 16860 chassis. The Keysight 16861A is the 34-channel member of the 16860-series portable logic analyzers that succeeded the 16800 series. OEM 16860-series literature lists 34 channels on 16861A, 4 GHz-class timing zoom, GHz-class conventional timing, 350 MHz-class state with higher-rate options, and deep memory options from 1M class upward in the 16860 family (16861A/16862A/16863A/16864A channel ladder). Portable 34-channel state/timing debug of embedded and FPGA designs in the 16860 chassis. Timing zoom in the 4 GHz class of 16800/16860 portables



MODEL

**Agilent / Keysight
16861A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

16861A

LISTING

<https://aumictechlabs.com/products/16861a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 16861A is a portable 34-channel logic analyzer built for high-speed digital signal capture and analysis across complex embedded systems and digital designs. It combines state and timing analysis modes to support both synchronous bus monitoring and asynchronous edge

detection, backed by deep memory and a 15-inch color touch-screen display for efficient signal navigation and troubleshooting.

Technical Specifications

Channel Configuration: 34 channels, supporting single-ended and differential signal types.

State Analysis (Synchronous Sampling)

State data rates up to 1.4 Gb/s

State clock rates up to 700 MHz

Automated threshold and sample position setup for high-speed bus measurements

Simultaneous eye diagrams across all channels

Timing Analysis (Asynchronous Sampling)

Conventional timing: 2.5 GHz (full-channel) / 5.0 GHz (half-channel)

Timing zoom: 12.5 GHz with 80 ps resolution

Standard memory: 2 Mb

Deep memory: 128 Mb (full-channel) / 256 Mb (half-channel)

Timing zoom memory: 256K for trigger event analysis

Trigger Sequencer: 1.4 GHz

Display: 15-inch (38.1 cm) color touch-screen

Key Features

Protocol support for DDR4, DDR3, DDR2, DDR, LPDDR4, LPDDR3, LPDDR2, and LPDDR

memory interfaces

Built-in removable SSD drive with USB 3.0 and LAN connectivity for high-speed data transfer

Flexible probe ecosystem - single-ended and differential probes available separately

Compatible with Keysight Logic Analyzer software version 06.30 and higher

Upgrade path via 16861AU model for existing units

Typical Applications

Digital design validation, memory interface debugging, system integration testing, and laboratory protocol analysis on high-speed digital buses.

Compatibility & Integration

Operates with Keysight Logic and Protocol Analyzer software. Application-specific analysis modules available. Standard accessories include keyboard, mouse, and power cord.

16861A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Portable logic analyzer
Series Family	Keysight 16860 Series
Logic Analyzer Channels	34
Sibling Models	16862A 68 ch, 16863A 102 ch, 16864A 136 ch class ladder
Predecessor 16821A	34 ch plus 48 ch pattern generator in 16800 series
Timing Zoom Class	4 GHz (250 ps) 64K depth class of 16800/16860 portables
Conventional Timing Class	1.0 GHz half-channel / 500 MHz full-channel class of 16800 sheet (confirm 16860 table)
State Clock Class	250 MHz standard-class with higher-rate options on 16860 series
Memory Options Class	1M / 4M / 16M / 32M option structure inherited from 16800; 16860 adds deeper options on some models
Form Factor	16860 portable logic analyzer
Operating System	Windows-based portable LA
Probing	16860-series flying-lead and connectorless pods
Remote	LAN and USB class of 16860
Display	built-in portable color display
Application	FPGA and embedded timing/state analysis
User Interface	16800/16860-class GUI
Documentation	Keysight 16860-series portable logic analyzer data sheet (16861A row)
Pattern Generator	not the 16821A 48-channel PG; 16861A is analyzer-only 34 ch
Verification	use the 16861A model-specific row, not 16821A PG rows
Operating Environment	laboratory portable ambient per 16860 manual
Power	AC mains portable chassis

16861A Specifications

PARAMETER	VALUE
Applications	Portable 34-channel state/timing debug of embedded and FPGA designs in the 16860 chassis.
Key Features	34 logic channels (16861A)
Deep memory options	Successor to 16801A/16821A 34-channel portables
Technical Specifications	Instrument Type: Portable logic analyzer

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
Instrument Type	Portable logic analyzer
Series Family	Keysight 16860 Series
Logic Analyzer Channels	34
Sibling Models	16862A 68 ch, 16863A 102 ch, 16864A 136 ch class ladder
Predecessor 16821A	34 ch plus 48 ch pattern generator in 16800 series
Timing Zoom Class	4 GHz (250 ps) 64K depth class of 16800/16860 portables
Conventional Timing Class	1.0 GHz half-channel / 500 MHz full-channel class of 16800 sheet (confirm 16860 table)
State Clock Class	250 MHz standard-class with higher-rate options on 16860 series
Memory Options Class	1M / 4M / 16M / 32M option structure inherited from 16800; 16860 adds deeper options on some models
Form Factor	16860 portable logic analyzer
Operating System	Windows-based portable LA
Probing	16860-series flying-lead and connectorless pods
Remote	LAN and USB class of 16860
Display	built-in portable color display
Application	FPGA and embedded timing/state analysis
User Interface	16800/16860-class GUI
Documentation	Keysight 16860-series portable logic analyzer data sheet (16861A row)
Pattern Generator	not the 16821A 48-channel PG; 16861A is analyzer-only 34 ch
Verification	use the 16861A model-specific row, not 16821A PG rows
Operating Environment	laboratory portable ambient per 16860 manual
Power	AC mains portable chassis
Notes On Options: confirm state-speed and memory option codes on the 16861A label	
Channel Math: 34 conventional timing channels	
Notes	
34-channel 16861A identity from Keysight 16860-series portable logic analyzer literature. Timing-zoom 4	

GHz/64K and 1 GHz/500 MHz conventional timing are the published 16800-series table also used as the portable-LA family class; confirm the 16861A-specific state-rate and memory option table before calibration use.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.