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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 16518

HP Agilent 16518A 4 GSa/s Timing Logic Analyzer Expansion Card The HP/Agilent 16518A is the expansion card for the 16517A 4 GSa/s timing / 1 GHz synchronous-state analyzer. OEM 16517A/18A data list 16 additional channels per 16518A (8 in half-channel mode), the same 64/128 Kbit memory depths and 2/4 GHz timing rates as the master, and a maximum of four 16518A cards for 80 channels on one 16500 timebase and trigger. Expanding 16517A high-speed timing/state capture beyond 16 channels on 16500 mainframes. The HP/Agilent 16518A is the expansion card for the 16517A 4 GSa/s timing / 1 GHz synchronous-state analyzer. OEM 16517A/18A data list 16 additional channels per 16518A (8 in half-channel mode), the same 64/128 Kbit memory depths and 2/4 GHz timing rates as the master, and a maximum of four 16518A cards for 80 channels on one 16500 timebase and trigger. Expanding 16517A high-speed timing/state capture beyond 16 channels on 16500 mainframes. Adds 16 channels per card to a 16517A master Same 4 GHz half-channel timing as the master



MODEL

**Agilent / Keysight
16518**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

16518

LISTING

<https://aumictechlabs.com/products/16518-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 16518 is an expansion module designed to enhance the capabilities of compatible Agilent/Keysight test platforms. This component integrates with modular instrument architectures to support advanced signal analysis and data acquisition tasks. The 16518 functions as an expansion or interface module within logic analyzer systems, enabling extended channel

density and analysis depth for digital signal characterization. Technical Specifications

Compatibility: Integrates with Agilent/Keysight test platforms including logic analyzers and oscilloscopes within VXI or similar modular instrument architectures

Related System Performance: Associated logic analyzer platforms provide up to 400 channels of general-purpose logic analysis and up to 80 channels of 1 GHz timing analysis

Dimensions (Accessory Kit): 10 × 8 × 3 inches

Weight (Accessory Kit): 2 lbs

Key Features

- Modular expansion architecture for scalable channel density
- Interface connectivity standard to Agilent/Keysight modular instrument systems
- Support for both general-purpose and high-speed timing analysis
- Expansion board accessory kit available (Keysight 16518-68701)

Typical Applications

- Digital signal characterization and timing analysis
- Logic-level protocol debugging
- Multi-channel state and timing measurement
- Integration with existing Agilent/Keysight measurement platforms

Compatibility & Integration

The 16518 integrates into Agilent/Keysight modular test systems. Expansion capability is supported through the 16518-68701 accessory kit, which provides additional functional modules for system configuration.

Documentation references include the Agilent/Keysight 16517A/16518A User's Reference Manual and compatibility with the 1651A logic analyzer family.

16518 Characteristics / Specifications

PARAMETER	VALUE
Model	16518A
Queue Model Token	16518
Instrument Type	logic analyzer expansion module
Requires Master	16517A
Channels Per Card	16 (8 in half-channel timing)
Maximum Expanders	4
Maximum Channels In Module	80 with master plus four 16518A
Full Channel Timing Sample Rate	2 GHz
Half Channel Timing Sample Rate	4 GHz
Timing Resolution	250 ps
Synchronous State Clock	1 GHz (module)
Memory Full Channel	64 Kbits per channel
Memory Half Channel	128 Kbits per channel
Setup Hold Window	700 ps adjustable in 50 ps increments
Trigger Sequencer Speed Maximum	500 MHz
Host Mainframes	16500A/B and 16501A expansion frame
Threshold	TTL, ECL, user definable plus or minus 5 V in 10 mV increments
Probe Impedance Class	500 ohm at 1 GHz
Standalone Operation	not supported without 16517A
Manufacturer	HP Agilent Keysight
Form Factor	16500-series plug-in expansion card
Timebase	shared with 16517A master
Trigger	shared module trigger resources

16518 Specifications

PARAMETER	VALUE
Applications	Expanding 16517A high-speed timing/state capture beyond 16 channels on 16500 mainframes.
Key Features	Adds 16 channels per card to a 16517A master
Up to four expanders (80 channels)	Requires 16517A master (cannot run standalone)
Technical Specifications	Model: 16518A
Notes	From Agilent 16517A/18A service guide and State and Timing Modules data (5966-3367E). Queue model 16518 maps to this expansion card.

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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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.