

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 5304A TIME INTERVAL COUNTER

The HP 5304A is a timer/counter snap-on module for the 5300 measurement system providing frequency period and time-interval functions in the classic modular HP counter family. General frequency and timing on 5300A/B mainframes, educational and service counting, and modular systems with optional battery operation. Snap-on timer counter for 5300 mainframes. Frequency period and time interval functions. Trigger Controls: Slope and level typical of timer modules. Overload Protection Class: Protected inputs per family. Bench Use: General purpose timing and frequency. Role and system compatibility from HP 5300 measurement system charts. Confirm exact MHz ceiling and sensitivity from the 5304A operating and service manual for the installed unit.



MODEL

HP / Agilent 5304A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

5304A

LISTING

<https://aumictechlabs.com/products/5304a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 5304A is a modular time interval counter designed as a plug-on module for the HP 5300A Measuring System mainframe. It delivers precise measurements of time intervals, frequency, and period averages with resolution dependent on the measuring system's clock frequency. The 5304A integrates with the 5300A's six-digit display and 10 MHz internal oscillator to provide temporal measurement capabilities across laboratory, research, and manufacturing environments. Technical Specifications Frequency Measurement: Up to 10 MHz Time Interval Measurement Range: 500 nanoseconds to 10,000 seconds Period Average Measurement Range:

10 Hz to 1 MHz Time Interval Resolution: Clock-dependent; 1 MHz clock yields 1 μ s resolution, 100 MHz clock provides 10 ns resolution Maximum Input Frequency: 10 MHz Input Channels: Channel A (frequency, period average, time interval start); Channel B (time interval stop) Totalizing Functionality: Supported Key Features Adjustable analog delay control on start input for triggering stability with complex or noisy signals BNC connectors for signal inputs on Channels A and B Large Centronics-style connector for mainframe integration Modular form factor optimized for 5300A system integration Typical Applications Precise temporal measurements in metrology, component characterization, and signal analysis requiring nanosecond to multisecond resolution across frequency ranges to 10 MHz. Compatibility & Integration Exclusive compatibility with HP 5300A Measuring System mainframe. Operates as a dedicated module within the 5300A platform, leveraging the mainframe's display and oscillator infrastructure.

5304A Characteristics / Specifications

PARAMETER	VALUE
Instrument Family	HP 5300 measurement system
Module Type	Timer counter plug-on
Mainframe Compatibility	5300A and 5300B
Display Digits With 5300B	up to 8
Display Digits With 5300A	up to 6
Measurement Functions	Frequency Period Time Interval class
Input Channels Class	Dual channel timing architecture class
Input Impedance Class	1 MOhm class family
Coupling Class	AC/DC
Sensitivity Class	Tens of mV rms class typical 5300 modules
Frequency Capability Class	Tens of MHz class within 5304 rating
Time Interval Function	yes
Period Function	yes
Gate Selection	Manual selectable
Form Factor	Snap-on module
Systems Path	HP-IB via 5312A on 5300B
Check Function	yes
Portability	yes with system battery options
Attenuator Class	Front panel attenuator typical
Trigger Controls	Slope and level typical of timer modules
Overload Protection Class	Protected inputs per family
Bench Use	General purpose timing and frequency

5304A Specifications

PARAMETER	VALUE
HP Agilent 5304A Timer Counter Module	Overview
Applications	General frequency and timing on 5300A/B mainframes, educational and service counting, and modular systems with optional battery operation.
Key Features	Snap-on timer counter for 5300 mainframes
Frequency period and time interval functions	Compatible with 5300A and 5300B displays
Technical Specifications	Instrument Family: HP 5300 measurement system

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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Notes	
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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.