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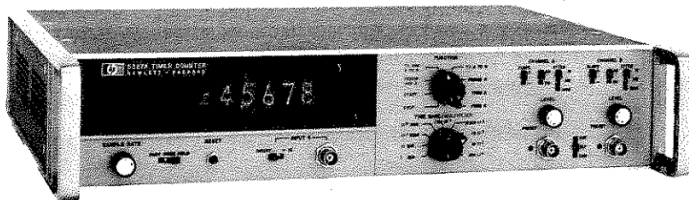
Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 5327A 550 MHZ TIMER

The HP 5327A is a 550 MHz universal timer/counter in the 5326/5327 family, providing frequency to 550 MHz, period, ratio, totalize, time interval, and time-interval averaging. OEM catalog specifications emphasize 100 ps-class averaged TI resolution, blanked 7-digit display (8 optional), and systems programming options. Used for general lab frequency and timing measurements to 550 MHz, high-resolution averaged time-interval work on repetitive signals, ratio and totalize counting, and automated BCD/remote-programmed test systems. Option H60 sensitivity 0 to 50 °C: 25 mV rms Option H60 typical sensitivity at 25 °C: 10–15 mV rms Remote programming options: Option 002 and Option 004 Specifications are from Hewlett-Packard 5326/5327 family catalog pages for the 5327A Universal Timer/Counter. The 5327B adds an integrating DVM; use 5327B documentation for voltage ranges.



MODEL

HP / Agilent 5327A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

5327A

LISTING

<https://aumictechlabs.com/products/5327a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 5327A is a precision timer/counter instrument designed for frequency and time interval measurements up to 550 MHz. Equipped with a prescaler assembly for extended frequency coverage, it delivers six distinct measurement functions and integrates directly into automated test environments. The 5327A combines high-sensitivity input amplification with versatile measurement capabilities, making it suitable for demanding pulse-width and timing analysis tasks. Technical Specifications Frequency range: DC to 550 MHz (with prescaler

assembly) Measurement functions: Frequency, Period, Period Average, Time Interval, Time Interval Average, Ratio Input: 50-ohm high-sensitivity amplifier DVM mode: DC voltage measurement up to 1000 V Weight: 25 lbs Dimensions: 16 × 14 × 10 in Key Features The prescaler assembly distinguishes the 5327A from lower-frequency variants, enabling measurements across a full 550 MHz span. High-sensitivity input amplification ensures detection of low-level signals without compromise. Time interval and period average functions support precise characterization of repetitive and single-shot events. Integrated DVM capability provides direct voltage readout for multi-parameter troubleshooting and characterization. Typical Applications Pulse-width measurement and analysis Time-critical frequency and period characterization Automated test system integration Multi-parameter device and circuit verification Compatibility & Integration The 5327A belongs to a family of precision counters sharing common technological foundations with related models including the 5326A, 53131A, 53132A, and successor 53200 series instruments. Operating and service manuals documenting complete technical specifications, schematics, and repair procedures are available for the 5326A/5327A series.

5327A Characteristics / Specifications

PARAMETER	VALUE
Frequency range	0 to 550 MHz
Period measurement frequency	dc to 10 MHz
Period resolution selectable	0.1 μ s to 10 s
Display digits	7 (8 optional Option 001)
Time interval standard range	0.1 μ s to 10^5 s class
Time interval averaging range	0.15 ns to 10 s
Time interval averaging resolution	100 ns / sqrt(intervals averaged)
Maximum averaged resolution class	about 10 ps with 10^8 averages
Periods averaged selectable	1 to 10^5 (10^6 with prescaling) decade steps
Gate times	0.1 μ s through 10 s decade steps
Operating temperature	0 °C to 50 °C
Power	115/230 V $\pm$ 10%, 50/60 Hz
Power consumption	70 W max
Net weight	7.4 kg
Shipping weight	8.7 kg
Dimensions	88.2 mm H $\times$ 425 mm W $\times$ 286 mmDStandard time base aging: less than 3×10^{-7} per month
BCD output option	Option 003
Remote programming options	Option 002 and Option 004
Sample rate modes	FAST, NORM, and HOLD

5327A Specifications

PARAMETER	VALUE
HP Agilent 5327A Universal Timer Counter	Overview
Key Features	550 MHz frequency capability using HP monolithic HF ICs
Blanking of leading zeros for clearer readout	Optional higher-sensitivity 25 mV rms Channel C (Option H60)
Technical Specifications	Frequency range: 0 to 550 MHz

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 °C to 50 °C
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Power	115/230 V ±10%, 50/60 Hz
Power consumption	70 W max
Net weight	7.4 kg
Shipping weight	8.7 kg
Dimensions	88.2 mm H × 425 mm W × 286 mmDStandard time base aging: less than 3×10 ⁻⁷ per month
BCD output option	Option 003
Remote programming options	Option 002 and Option 004
Sample rate modes	FAST, NORM, and HOLD Notes Specifications are from Hewlett-Packard 5326/5327 family catalog pages for the 5327A Universal Timer/Counter. The 5327B adds an integrating DVM; use 5327B documentation for voltage ranges.

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 emphasize 100 ps-class averaged TI resolution, blanked 7-digit display (8 optional), and systems programming options.

Applications
Used for general lab frequency and timing measurements to 550 MHz, high-resolution averaged time-interval work on repetitive signals, ratio and totalize counting, and automated BCD/remote-programmed test systems.

Key Features
550 MHz frequency capability using HP monolithic HF ICs
Time interval averaging for 100 ps/ $\sqrt{N}$ resolution on repetitive signals
Hysteresis-compensated slope selection keeping trigger points stable
Front-panel trigger lamps for attenuator/level setup confirmation
Blanking of leading zeros for clearer readout
Optional higher-sensitivity 25 mV rms Channel C (Option H60)

Technical Specifications

Technical Specifications

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Period resolution selectable	0.1 μ s to 10 s
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Power consumption	70 W max
Net weight	7.4 kg
Shipping weight	8.7 kg
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Technical Specifications

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Frequency range	0 to 550 MHz
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Period resolution selectable	0.1 μ s to 10 s
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Option H60 sensitivity 0 to 50 °C: 25 mV rms
Option H60 typical sensitivity at 25 °C: 10–15 mV rms

Specifications

PARAMETER	VALUE
BCD output option	Option 003
Remote programming options	Option 002 and Option 004
Sample rate modes	FAST, NORM, and HOLD

Notes
Specifications are from Hewlett-Packard 5326/5327 family catalog pages for the 5327A Universal Timer/Counter. The 5327B adds an integrating DVM; use 5327B documentation for voltage ranges.

Ordering Information

OPTION	DESCRIPTION
Option 003	Remote programming options: Option 002 and Option 004

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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<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.