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**Data Sheet**

August 15, 2026

HEWLETT PACKARD

# Hewlett Packard 5315A 108-126V Universal Counter,

Agilent Keysight 5315A Universal Counter 100 MHz The HP 5315A is a portable reciprocal-taking universal counter. OEM HP Journal January 1979 and 5315A/B operating literature list 0.1 Hz to 100 MHz frequency, DC-coupled 0 to 100 MHz and AC-coupled 30 Hz to 100 MHz on channels A and B, 10 mV rms sensitivity to 10 MHz and 25 mV rms to 100 MHz, 100 ns time-interval LSD (averaging to less than 1 ns on repetitive signals), period 10 ns to 10 s, seven-digit display, and a rugged plastic portable case (5315B is the metal half-rack EMI version). Mains 100/120/220/240 V; size 238 × 98 × 276 mm. The HP 5315A is a portable reciprocal-taking universal counter. OEM HP Journal January 1979 and 5315A/B operating literature list 0.1 Hz to 100 MHz frequency, DC-coupled 0 to 100 MHz and AC-coupled 30 Hz to 100 MHz on channels A and B, 10 mV rms sensitivity to 10 MHz and 25 mV rms to 100 MHz, 100 ns time-interval LSD (averaging to less than 1 ns on repetitive signals), period 10 ns to 10 s, seven-digit display, and a rugged plastic portable case (5315B is the metal half-rack EMI version). Mains 100/120/220/240 V; size 238 × 98 × 276 mm. Frequency, period, time interval, TI average, TI holdoff, ratio, and totalize in bench and optional battery field use.



MODEL

**Hewlett Packard  
5315A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**5315A**

LISTING

<https://aumictechlabs.com/products/5315a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

**This unit**

The Hewlett Packard 5315A is a universal counter instrument delivering precise frequency, period, time interval, ratio, and totalize measurements across a wide dynamic range. Built around a Multiple Register Counter (MRC) architecture with reciprocal counting techniques, it achieves high-resolution frequency measurements even at lower frequencies. The instrument covers 0.1 Hz to 100 MHz on Channels A and B, expandable to 1.0 GHz with optional Channel C. Dual independent input channels provide full measurement flexibility with independent trigger level, slope, and sensitivity controls, plus switchable AC/DC coupling and a low-pass filter.

**Technical Specifications**

**Frequency & Period:** Frequency: 0.1 Hz to 100 MHz (1.0 GHz with optional Channel C) Pulsed RF signals as narrow as 60 ns supported Resolution: 7 digits per second of gate time Period range: 10 ns to  $10^5$  s; resolution down to 1 ns depending on gate time Time Interval: Single-shot: 100 ns to 100,000 s Averaging: 10 ps resolution Minimum dead time (stop to start): 200 ns Operator-selectable delay capability

**Input Characteristics (Channels A & B):** DC-coupled: 0 Hz to 100 MHz; AC-coupled: 30 Hz to 100 MHz Sensitivity: 10 mV rms sine wave to 10 MHz; 25 mV rms sine wave to 100 MHz; 75 mV peak-to-peak pulse (5 ns minimum width) Dynamic range: 0–5 V peak-to-peak (DC to 10 MHz); 75 mV–5 V peak-to-peak (10–100 MHz) Signal operating range: +2.5 V DC to –2.5 V DC Impedance: 1 M $\Omega$  nominal, shunted by <40 pF Attenuator: X1 or X20 nominal Trigger level: Variable –2.5 V DC to +2.5 V DC Slope: Independent  $\pm$  selection Low-pass filter: 100 kHz nominal, 3 dB point, switchable Time Base: 10 MHz reference oscillator Standard stability:  $\pm 5$  parts in  $10^6$  (0–50°C) Aging: <3 parts in  $10^7$ /month after 30 days continuous operation Optional TCXO (Option 001):  $\pm 1$  part in  $10^6$  (0–40°C) Line voltage stability: <1 part in  $10^7$  ( $\pm 10\%$  variation) Display: 8-digit amber LED with engineering units annunciator

**Key Features** Ratio measurement (A/B) and totalize modes (manual gating, A gated by B) Continuously adjustable sensitivity control to 500 mV rms nominal Automatic trigger level set to 0 V nominal in SENSITIVITY mode Dual-channel architecture for independent or simultaneous measurements

## 5315A Characteristics / Specifications

| PARAMETER              | VALUE                                                                                                            |
|------------------------|------------------------------------------------------------------------------------------------------------------|
| Instrument Type        | Reciprocal universal counter                                                                                     |
| Frequency Range        | 0.1 Hz to 100 MHz                                                                                                |
| Input Range Dc Coupled | 0 to 100 MHz (A and B)                                                                                           |
| Input Range Ac Coupled | 30 Hz to 100 MHz (A and B)                                                                                       |
| Sensitivity To 10 MHz  | 10 mV rms sine wave                                                                                              |
| Sensitivity To 100 MHz | 25 mV rms sine wave                                                                                              |
| Pulse Sensitivity      | 75 mV peak-to-peak pulse (HP Journal input table)                                                                |
| Time Interval Lsd      | 100 ns                                                                                                           |
| Time Interval Average  | averaging improves resolution to less than 1 ns on repetitive signals                                            |
| Period Range           | 10 ns to 10 s                                                                                                    |
| Time Interval Range    | 100 ns to 10 s                                                                                                   |
| Display Digits         | at least 7 digits displayed per second of gate time                                                              |
| Functions              | frequency, period, time interval, TI average, TI holdoff (delay), ratio, totalize with manual or external gating |
| Channel Modes          | separate or common A; independent plus/minus slope                                                               |
| Channel A Filter       | low-pass, switchable in or out                                                                                   |
| Mains Voltage          | 100, 120, 220, 240 V                                                                                             |
| Size WxHxD             | 238 mm x 98 mm x 276 mm (9.4 in x 3.9 in x 10.9 in)                                                              |
| Package 5315A          | rugged plastic portable case                                                                                     |
| Package 5315B          | standard HP metal half-rack package, lower radiated emissions                                                    |
| Battery                | optional internal battery pack for portable/field use                                                            |
| Literature             | HP Journal January 1979; 5315A/B Operating and Service Manual 05315-90021                                        |
| Serial Prefix Example  | 2120A class manuals                                                                                              |
| Architecture           | two-channel reciprocal counter                                                                                   |

# 5315A Specifications

| PARAMETER                                        | VALUE                                         |
|--------------------------------------------------|-----------------------------------------------|
| Agilent Keysight 5315A Universal Counter 100 MHz | Overview                                      |
| Key Features                                     | Reciprocal 100 MHz two-channel counter        |
| Optional internal battery pack                   | 5315B metal package for system EMI            |
| Technical Specifications                         | Instrument Type: Reciprocal universal counter |

# 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                                                                                         | Reciprocal universal counter                                                                                     |
| Frequency Range                                                                                         | 0.1 Hz to 100 MHz                                                                                                |
| Input Range Dc Coupled                                                                                  | 0 to 100 MHz (A and B)                                                                                           |
| Input Range Ac Coupled                                                                                  | 30 Hz to 100 MHz (A and B)                                                                                       |
| Sensitivity To 10 MHz                                                                                   | 10 mV rms sine wave                                                                                              |
| Sensitivity To 100 MHz                                                                                  | 25 mV rms sine wave                                                                                              |
| Pulse Sensitivity                                                                                       | 75 mV peak-to-peak pulse (HP Journal input table)                                                                |
| Time Interval Lsd                                                                                       | 100 ns                                                                                                           |
| Time Interval Average                                                                                   | averaging improves resolution to less than 1 ns on repetitive signals                                            |
| Period Range                                                                                            | 10 ns to 10 s                                                                                                    |
| Time Interval Range                                                                                     | 100 ns to 10 s                                                                                                   |
| Display Digits                                                                                          | at least 7 digits displayed per second of gate time                                                              |
| Functions                                                                                               | frequency, period, time interval, TI average, TI holdoff (delay), ratio, totalize with manual or external gating |
| Channel Modes                                                                                           | separate or common A; independent plus/minus slope                                                               |
| ChannelAFilter                                                                                          | low-pass, switchable in or out                                                                                   |
| Mains Voltage                                                                                           | 100, 120, 220, 240 V                                                                                             |
| Size WxHxD                                                                                              | 238 mm x 98 mm x 276 mm (9.4 in x 3.9 in x 10.9 in)                                                              |
| Package 5315A                                                                                           | rugged plastic portable case                                                                                     |
| Package 5315B                                                                                           | standard HP metal half-rack package, lower radiated emissions                                                    |
| Battery                                                                                                 | optional internal battery pack for portable/field use                                                            |
| Literature                                                                                              | HP Journal January 1979; 5315A/B Operating and Service Manual 05315-90021                                        |
| Serial Prefix Example                                                                                   | 2120A class manuals                                                                                              |
| Architecture                                                                                            | two-channel reciprocal counter                                                                                   |
| Notes                                                                                                   |                                                                                                                  |
| Frequency, sensitivity, TI, period, size, and mains rows from HP Journal January 1979 5315A article and |                                                                                                                  |

5315A/B operating literature. Channel C 1 GHz (003) rows are omitted unless that option is on the faceplate.

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto: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.