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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 8161A 100MHz PULSE GENERATOR

HP 8161A Programmable Pulse Generator 100 MHz The HP 8161A is a precision 100 MHz HP-IB programmable pulse generator. All pulse parameters are programmable from the front-panel keyboard or via HP-IB, with values and errors shown on the front-panel display. Transition times are independently adjustable from 1.3 ns to 900 us (also specified less than 1 ns 20 percent to 80 percent for ECL). High and low levels are adjustable within about plus/minus 5 V. ECL and high-speed digital IC characterization; programmable ATE pulse stimulus; automated width/delay sweeps; dual-channel Option 020 systems. The HP 8161A is a precision 100 MHz HP-IB programmable pulse generator. All pulse parameters are programmable from the front-panel keyboard or via HP-IB, with values and errors shown on the front-panel display. Transition times are independently adjustable from 1.3 ns to 900 us (also specified less than 1 ns 20 percent to 80 percent for ECL). High and low levels are adjustable within about plus/minus 5 V. ECL and high-speed digital IC characterization; programmable ATE pulse stimulus; automated width/delay sweeps; dual-channel Option 020 systems.



MODEL

HP / Agilent 8161A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

8161A

LISTING

<https://aumictechlabs.com/products/8161a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 8161A is a fully programmable 100 MHz pulse generator engineered for precision timing and signal generation in research, semiconductor testing, and RF applications. Front-panel keyboard and HP-IB control enable flexible operation with nine storable instrument setups. Dual-

channel capability (optional) supports synchronous or complex waveform generation. Technical Specifications Pulse Generation: Maximum frequency: 100 MHz Output voltage: ± 5 V (adjustable) Pulse width range: 4.0 ns to 990 ms Pulse delay range: 0.0 ns to 990 ms Double pulse range: 8.0 ns to 990 ms Transition times: 1.3 ns to 900 μ s (adjustable; 20–80% rise/fall, <1 ns possible) Timing period range: 10 ns to 980 ms Output impedance: 50 Ω Accuracy and Stability: Amplitude accuracy: $\pm 1\%$ Pulse width accuracy: $\pm 1\%$ Basic accuracy: 1–3% Maximum jitter: 0.1% + 50 ps (< 999 ns) Resolution: 100 ps (best case) Key Features ECL-compliant transition times with sub-nanosecond slew rates Normal and complement output selection; output enable/disable Burst and gate trigger modes Nine independent stored setups, manually or remotely recalled Logical front-panel display with parameter, value, unit, and error status Standard HP-IB interface for remote automation Typical Applications Semiconductor device characterization, digital circuit validation, RF signal verification, and high-speed pulse sequence generation requiring sub-nanosecond timing accuracy and ECL logic compatibility. Compatibility & Integration HP-IB standard interface enables integration into automated test systems and remote control environments. BNC(f) output connectors provide industry-standard signal routing. Benchtop form factor: 178 mm H $\times$ 426 mm W $\times$ 530 mm D, 46 lb. Operates on 115/230 Vac, 48–66 Hz.

Features & description

From manufacturer datasheet

Features

- Up to 100 MHz repetition
- Transitions independently adjustable 1.3 ns to 900 us
- Pulse width 4.0 ns to 990 ms; delay 0.0 ns to 990 ms
- Double pulse 8.0 ns to 990 ms
- Nine store/recall front-panel setups; Option 020 second channel

8161A Characteristics / Specifications

PARAMETER	VALUE
Model	8161A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Programmable pulse generator
Maximum Repetition Rate	100 MHz
Timing Period	10 ns to 980 ms
Pulse Width	4.0 ns to 990 ms
Pulse Width Accuracy	plus/minus 1 percent
Pulse Delay	0.00 ns to 990 ms
Double Pulse Range	8.0 ns to 990 ms
Transition Times Adjustable	1.3 ns to 900 us independently
Transition Times ECL Spec	less than 1 ns (20 percent to 80 percent of amplitude)
High Level Range	-4.95 V to +5.00 V
Low Level Range	-5.00 V to +4.95 V
Output Amplitude Accuracy	plus/minus 1 percent
Polarity	positive and negative outputs
Output Connectors	BNC female
Normal Complement Selection	yes
Output Enable Disable	yes
Store Recall Setups	9 complete front panel setups
Remote Interface	HP-IB
Size	178 mmHx 426 mmWx 530 mmDNet Weight: 46 lb class
Mains	115/230 Vac +10 percent -22 percent; 48 to 66 Hz
Alias	HP 8161A; Agilent 8161A; Keysight 8161A

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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PARAMETER	VALUE
Size	178 mm H x 426 mm W x 530 mm D
Net Weight	46 lb class
Mains	115/230 Vac +10 percent -22 percent; 48 to 66 Hz
Alias	HP 8161A; Agilent 8161A; Keysight 8161A
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Output Amplitude Accuracy	plus/minus 1 percent
Polarity	positive and negative outputs
Output Connectors	BNC female
Normal Complement Selection	yes
Output Enable Disable	yes
Store Recall Setups	9 complete front panel setups

PARAMETER	VALUE
Remote Interface	HP-IB

Option 001: rear panel inputs and outputs
Option 020: second channel (rate common)
Option 700: built-in MATE/CIIL compatibility

Specifications

PARAMETER	VALUE
Size	178 mmHx 426 mmWx 530 mmDNet Weight: 46 lb class
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Alias	HP 8161A; Agilent 8161A; Keysight 8161A

Notes
Specs from HP/Agilent 8161A product literature and reseller OEM summaries matching the operating manual table. Confirm Option 020 dual-channel hardware on the unit.

Ordering Information

OPTION	DESCRIPTION
Option 020	systems.

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

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788 S 500 E, Pleasant Grove, UT 84062
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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.