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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 8118A 100Mbit/s PULSE PATTERN GENERATOR

HP 8118A 100 Mb/s Pulse Pattern Generator The HP 8118A is a dual-channel pulse/pattern generator for serial data applications at rates to 100 Mb/s. It provides two 16 kb memory channels for programmable patterns, supporting multilevel signal simulation and word/pattern testing beyond simple pulse generators. Serial data and communications pattern stimulus; multilevel waveform simulation; digital device characterization needing stored patterns. The HP 8118A is a dual-channel pulse/pattern generator for serial data applications at rates to 100 Mb/s. It provides two 16 kb memory channels for programmable patterns, supporting multilevel signal simulation and word/pattern testing beyond simple pulse generators. Serial data and communications pattern stimulus; multilevel waveform simulation; digital device characterization needing stored patterns.



MODEL

HP / Agilent 8118A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

8118A

LISTING

<https://aumictechlabs.com/products/8118a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 8118A is a dual-channel, 100 Mbit/s pulse pattern generator engineered for precise signal generation across IC, module, and board-level testing. This benchtop instrument delivers programmable pulse control with output data rates up to 100 Mbit/s in NRZ format, supporting RZ and DNRZ modes at speeds to 50 Mbit/s. The 8118A generates complex digital patterns including

word sequences (3 to 256 bit words, up to 3640 words per pattern), random patterns up to 16384 bits, and PRBS sequences. Each channel provides 16 KB of pattern memory and independently programmable pulse parameters: minimum pulse width of 10 ns, maximum width of 950 ms, period range from 20 ns to 950 ms, and delay range from 75 ns to 950 ms. Output impedance is 50 Ω with maximum voltage swing to 16 V and 1% output accuracy. Gate-triggered operation and built-in parametric capabilities enable combined digital pattern and signal degradation testing. GPIB interface supports remote instrument control and automated test sequences. Designed for indoor benchtop operation (5–40 °C, $\leq 80\%$ RH, ≤ 2000 m altitude). The unit is out of production since November 1993 and out of support since October 1998, though third-party calibration and repair services remain available.

Features & description

From manufacturer datasheet

Features

- Data rates to 100 Mb/s • Dual 16 kb memory channels • Programmable pulse/pattern generation • Multilevel signal simulation capability • Serial data oriented versus simple 50 MHz pulse boxes

8118A Characteristics / Specifications

PARAMETER	VALUE
Model	8118A
Manufacturer	Hewlett Packard
Instrument Type	Pulse pattern generator
Maximum Data Rate	100 Mb/s
Memory Channels	2
Memory Depth Per Channel	16 kb
Channel Count	dual channel
Pattern Type	programmable stored patterns
Application Class	serial data and multilevel simulation
Related Pattern Generators	8018A 50 Mbit/s class; 3760A PRBS to 150 Mb/s class
Remote Control Class	HP-IB era pattern generators
Output Format Class	dual serial data streams
Alias	HP 8118A
Family	HP Boeblingen pulse and data generators
Word Orientation	patterns divisible into serial words for byte oriented systems
Stimulus Role	device under test serial input drive
Complementary Use	pair with error detectors / scopes for BER style benches
Operating Temperature Class	0 to 55 C lab instruments
Mains Class	line powered bench instrument
Maximum Pattern Length Class	16384 bits per channel (16 kb)
Dual Channel Operation	independent or related serial streams
Intended Bit Rate Class	up to 100000000 bits per second
Nonvolatile Pattern Storage Class	memory based pattern generator
Data Rate	100 Mb/s
Operating temperature	Class: 0 to 55 C lab instruments

8118A Specifications

PARAMETER	VALUE
HP 8118A 100 Mb/s Pulse Pattern Generator	Overview
Key Features	- Data rates to 100 Mb/s
Technical Specifications	Model: 8118A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 to 55 C lab instruments
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Operating Temperature Class	0 to 55 C lab instruments
Mains Class	line powered bench instrument
Maximum Pattern Length Class	16384 bits per channel (16 kb)
Dual Channel Operation	independent or related serial streams
Intended Bit Rate Class	up to 1000000000 bits per second
Nonvolatile Pattern Storage Class	memory based pattern generator Notes Rows from HP Memory Project pulse-generator catalog summaries describing the 8118A 100 Mb/s dual 16 kb architecture. Full electrical amplitude/timing tables should be confirmed from the 8118A operating manual for the serial prefix if needed beyond architecture identity.

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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architecture. Full electrical amplitude/timing tables should be confirmed from the 8118A operating manual for the serial prefix if needed beyond architecture identity.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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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.