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Data Sheet
August 13, 2026

HP / AGILENT

HP / Agilent 8114A High Power Pulse Generator, 100 V / 2 A

Agilent 8114A 100 V / 2 A Programmable Pulse Generator The Agilent/HP 8114A isasingle-channel high-power programmable pulse generator, 15 MHz maximum repetition rate, 100 Vpp (2 A) into an open circuit (or from 1 k ohm into 50 ohm). Transitions are 7 ns fixed. Pulse width is variable; optional Option 001 addsavariable baseline of plus/minus 25 V. SCPI/IEEE-488.2 programming, counted burst, double pulse, and an inhibit input protect the DUT. High-voltage/high-current pulse characterization; power-device and laser-diode drive (within ratings); ATE pulse stimulus with GPIB; gated or triggered patterns synchronized to an external clock. The Agilent/HP 8114A isasingle-channel high-power programmable pulse generator, 15 MHz maximum repetition rate, 100 Vpp (2 A) into an open circuit (or from 1 k ohm into 50 ohm). Transitions are 7 ns fixed. Pulse width is variable; optional Option 001 addsavariable baseline of plus/minus 25 V. SCPI/IEEE-488.2 programming, counted burst, double pulse, and an inhibit input protect the DUT. High-voltage/high-current pulse characterization; power-device and laser-diode drive (within ratings); ATE pulse stimulus with GPIB; gated or triggered patterns synchronized to an external clock.

MODEL **HP / Agilent 8114A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **8114A**	LISTING **https://aumictechlabs.com/products/8114a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP/Agilent 8114A is a single-channel high-power pulse generator engineered to produce fast, clean positive or negative pulses with user-definable amplitude, current, and duty cycle limits. Operating at pulse repetition rates up to 15 MHz with variable pulse widths and transition times as fast as 7 ns, the instrument delivers 100 V and 2 A into high-impedance loads, or 50 Vpp into 50 Ω matched conditions. Built-in protection features and an inhibit input allow external TTL signals to control output behavior, making it suitable for semiconductor device testing, laser diode driving, and high-speed digital circuit characterization. Full SCPI programmability, external triggering and gating, burst mode capability, and double-pulse generation provide the flexibility demanded by both benchtop evaluation and automated test environments. The instrument maintains low jitter and accurate, repeatable pulse generation across 0°C to 55°C ambient operation following a 30-minute warm-up period. Technical Specifications Maximum pulse amplitude: 100 V into high-impedance load; 50 Vpp into 50 Ω load Maximum pulse current: 2 A Pulse transition times: < 12 ns (high-impedance source into 50 Ω); < 7 ns (50 Ω/50 Ω mode) Repetition rate: Up to 15 MHz Pulse width: Variable Baseline voltage: 0 V typical; optional ±25 V shift (Option 001) Output waveforms: Positive or negative pulses Operating temperature: 0°C to 55°C ambient Key Features Low jitter and highly repeatable pulse generation Programmable voltage, current, and duty cycle limits with DUT protection TTL-compatible inhibit input supporting edge and level triggering Counted burst mode and configurable double-pulse capability External triggering and gating support Full SCPI programmability via front-panel graphic display Fast memory store/recall of hundreds of instrument configurations (optional 1 MB memory card) Typical Applications Semiconductor device and component testing Laser diode driver evaluation High-speed digital circuit characterization Automated test system integration Compatibility & Integration External synchronization via manual trigger key or external signal; TTL control inputs for gate enable/disable functionality.

Features & description

From manufacturer datasheet

Features

• 100 Vpp / 2 A into open; levels programmable as voltage or current • Load compensation for non-50 ohm loads • Programmable voltage, current, and duty-cycle limits • Inhibit input holds output at baseline from DUT/system TTL • Burst 2 to 65536; double-pulse in all trigger modes except External Width • Option UN2 rear connectors; PCMCIA memory card for setups

8114A Characteristics / Specifications

PARAMETER	VALUE
Model	8114A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	High power programmable pulse generator
Alias	HP 8114A; Agilent 8114A; Keysight 8114A
Channels	1
Maximum Repetition Rate	15 MHz
Amplitude Into Open	100 Vpp (2 A)
Transitions	7 ns fixed
Pulse Width Range	10 ns to 99.9 ms class (width, duty cycle, or trailing-edge delay)
Duty Cycle Range	0.1 percent to 100 percent subject to width and period limits
Burst Count	2 to 65536 (single or double pulses)
Double Pulse Minimum Period	134 ns
External Input Impedance	10 k ohm
External Threshold	-10 V to +10 V with 100 mV resolution
External Max Input	plus/minus 50 V
External Sensitivity Typical	plus/minus 300 mVpp
External Input Transitions	less than 100 ns
External Frequency	dc to 15 MHz
External Minimum Pulsewidth Typical	10 ns
Trigger Output Level	fixed TTL (2.5 V into 50 ohm)
Trigger Output Impedance Typical	50 ohm
Trigger Output Transitions Typical	5 ns
Delay External In To Trigger Out Typical	24 ns
Inhibit Input Impedance	100 k ohm
Inhibit Threshold Typical	1.5 V TTL

PARAMETER	VALUE
Inhibit Frequency	dc to 5 MHz
Inhibit Minimum Pulsewidth Typical	100 ns
Inhibit Response Typical	200 ns
Trigger Modes	continuous; external triggered; external gated; external width; manual
Remote Control	IEEE 488.2 1987 and SCPI 1992.0
HPIB Function Codes	SH1 AH1 T6 L4 SR1 RL1 PP0 DC1 DT1 C0
Operating Temperature	0 C to +55 C
Storage Temperature	-40 C to +70 C
Humidity	95 percent RH up to 40 C
EMC	EN 55011 Group 1 ClassASafety: IEC 1010 class 1
Mains	100-240 Vac plus/minus 10 percent 50-60 Hz; 100-120 Vac plus/minus 10 percent 400 Hz
Power Consumption	500 VA maximum
Max Dimensions	133 mm x 426 mm x 422 mm
Net Weight	14 kg
Shipping Weight	17 kg
Recalibration Period	one year recommended
Warm Up	30 minutes; specs with 50 ohm source/load

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 C to +70 C
Operating temperature	0 C to +55 C
Operating Temperature	0 C to +55 C
Humidity	95 percent RH up to 40 C
EMC	EN 55011 Group 1 ClassASafety: IEC 1010 class 1
Mains	100-240 Vac plus/minus 10 percent 50-60 Hz; 100-120 Vac plus/minus 10 percent 400 Hz
Power Consumption	500 VA maximum
Max Dimensions	133 mm x 426 mm x 422 mm
Net Weight	14 kg
Shipping Weight	17 kg
Recalibration Period	one year recommended
Warm Up	30 minutes; specs with 50 ohm source/load Notes Specs from Agilent 8114A 100 V/2 A Programmable Pulse Generator data sheet 5980-1213E. Timing characteristics are measured at 50 percent amplitude at fastest transitions in continuous mode with 50 ohm source impedance. Confirm Option 001 baseline and UN2 rear I/O on the unit.

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
Model	8114A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	High power programmable pulse generator
Alias	HP 8114A; Agilent 8114A; Keysight 8114A
Channels	1
Maximum Repetition Rate	15 MHz
Amplitude Into Open	100 Vpp (2 A)
Transitions	7 ns fixed
Pulse Width Range	10 ns to 99.9 ms class (width, duty cycle, or trailing-edge delay)
Duty Cycle Range	0.1 percent to 100 percent subject to width and period limits
Burst Count	2 to 65536 (single or double pulses)
Double Pulse Minimum Period	134 ns
External Input Impedance	10 k ohm
External Threshold	-10 V to +10 V with 100 mV resolution
External Max Input	plus/minus 50 V
External Sensitivity Typical	plus/minus 300 mVpp
External Input Transitions	less than 100 ns
External Frequency	dc to 15 MHz
External Minimum Pulsewidth Typical	10 ns
Trigger Output Level	fixed TTL (2.5 V into 50 ohm)
Trigger Output Impedance Typical	50 ohm
Trigger Output Transitions Typical	5 ns
Delay External In To Trigger Out Typical	24 ns
Inhibit Input Impedance	100 k ohm
Inhibit Threshold Typical	1.5 V TTL
Inhibit Frequency	dc to 5 MHz

PARAMETER	VALUE
Inhibit Minimum Pulsewidth Typical	100 ns
Inhibit Response Typical	200 ns
Trigger Modes	continuous; external triggered; external gated; external width; manual
Remote Control	IEEE 488.2 1987 and SCPI 1992.0
HPIB Function Codes	SH1 AH1 T6 L4 SR1 RL1 PP0 DC1 DT1 C0
Operating Temperature	0 C to +55 C
Storage Temperature	-40 C to +70 C
Humidity	95 percent RH up to 40 C
EMC	EN 55011 Group 1 ClassASafety: IEC 1010 class 1
Mains	100-240 Vac plus/minus 10 percent 50-60 Hz; 100-120 Vac plus/minus 10 percent 400 Hz
Power Consumption	500 VA maximum
Max Dimensions	133 mm x 426 mm x 422 mm
Net Weight	14 kg
Shipping Weight	17 kg
Recalibration Period	one year recommended

Option 001: variable baseline plus/minus 25 V
Option UN2: rear panel connectors instead of front
Warm Up: 30 minutes; specs with 50 ohm source/load

Notes
Specs from Agilent 8114A 100 V/2 A Programmable Pulse Generator data sheet 5980-1213E. Timing characteristics are measured at 50 percent amplitude at fastest transitions in continuous mode with 50 ohm source impedance. Confirm Option 001 baseline and UN2 rear I/O on the unit.

Ordering Information

OPTION	DESCRIPTION
Option 001	addsavariable baseline of plus/minus 25 V. SCPI/IEEE-488.2 programming, counted burst, double pulse, and an inhibit input protect the DUT.

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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Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.