

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
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Full-service, independent repair center
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Custom engineering
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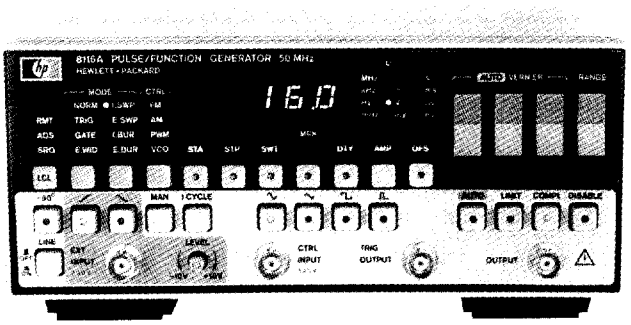
Find the *Keysight / Agilent 8116A* at our website: ***Click HERE***

FUNCTION GENERATORS & WAVEFORM SYNTHESIZERS

1 mHz to 50 MHz Pulse/Function Generator

HP 8116A

- Sine, triangle, square, haverfunctions, and dc
- 1 mHz to 50 MHz, 32 V p-p for all waveforms
- Variable (10 ns min) pulse width, 6 ns transitions
- Modulation
- Self-prompting operating concept
- Error recognition and self testing



HP 8116A with Option 001, burst and logarithmic sweep

DESIGNED FOR HP-IB SYSTEMS

HP Instrument Drivers

HP 8116A Pulse/Function Generator

The fully programmable HP 8116A features pulse as well as function generator capabilities in one small unit. A broad 1-mHz to 50-MHz band for all waveforms and a wide choice of operating and modulating modes assure high flexibility. These factors, plus good repeatability, make the HP 8116A a sound, long-term investment.

Specifications (50 Ω load, 0° to 55° C)

Functions
Sine, triangle, ramp, square, pulse, haversine, and dc

Timing
Frequency: 1 mHz to 50 MHz
Duty Cycle: 10% to 90% in 1% steps (20% to 80% above 1 MHz, 50% above 10 MHz)
Pulse Width: 10 ns to 999 ms
Pulse/Squarewave Transitions: <7 ns

Output (50-Ω source)
Amplitude: 10 mV p-p to 16.0 V p-p into 50 Ω load
(20 mV p-p to 32.0 V p-p into open)
Offset/DC: 7.95 V (795 mV for amplitude <100 mV p-p) into 50 Ω. Voltages double into open

Accuracy
Typically 5%, please request data sheet 5953-6325 for performance details
Resolution: 3 digits
Repeatability: Typically 1%

Operating Modes
Standard: Internal, trigger, gate, and external width
Option 001: Logarithmic up sweep (single range 1 mHz to 50 MHz)
Sweep time/decade: Selectable 1-2-5 sequence from 10 ms to 500 s
Repetition: Continuous or external trigger
Counted burst: 1 to 1,999 cycles, any waveform up to 40 MHz
Repetition: Internal 100 ns to 999 ms or external trigger (pulse mode, external trigger only)

Control Modes
Frequency Modulation: ±5% max deviation
Sensitivity: 1 V for 1% deviation
Modulating frequency: DC to 20 kHz
Amplitude Modulation
Sensitivity: ±2.5 V for 100% mod. (+2.5 V to −7.5 V for DSBSC)
Modulating frequency: DC to 1 MHz

Pulse Width Modulation
Range: 10 ns to 1 s in 8 nonoverlapping decade ranges
Max width ratio: 10:1
Sensitivity: ±9 V for 1:10 ratio
Voltage-Controlled Oscillator
Range: 2 decades in range 1 MHz to 50 MHz
Sensitivity: 0.1 V to 10 V for 2 decades
Modulating frequency: dc to 1 kHz

Auxiliary Modes
Manual: Simulates external input
1 Cycle (Opt 001): Triggers single output cycle in trigger, gate, and external burst modes
Auto Vernier: Continuous vernier that can be remotely or manually stopped
Limit: Programmable maximum output levels to protect DUT
Complement: Selectable normal/complement output
Disable: Relay disconnects output

Auxiliary Inputs and Outputs
External Input
Threshold: ±10 V adjustable
Max input voltage: ±20 V
Sensitivity: 500 mV p-p
Min pulse width: 10 ns
Input impedance: 10 kΩ typ
Trigger slope: Positive, negative, and off
Control Input
Max input voltage: ± 20 V
Input impedance: 10 kΩ typ
Trigger Output
Output levels: 0/2.4 V typ
Output impedance: 50 Ω typ
X-Output (Opt 001) for sweep X-Y recording (rear panel)
Output levels: 0 V (= start frequency) to 10 V max
Slope: 1.5 V per sweep decade
Marker Output (Opt 001) for sweep (rear panel)
Output levels: TTL
Leading edge: Positive at selected marker frequency
Hold Input (Opt 001), rear panel
Input levels: TTL
Leading edge: Positive transition causes HP 8116A output (f <10 Hz) to hold at instantaneous level. Output droop 0.01% per second
Max input voltage: ±20 V

General Specifications
Environmental
Storage temperature: −40° C to +70° C
Operating temperature: 0° C to 55° C
Humidity: 95% RH, 0° C to 40° C
Power: 100/120/220/240 V rms; +5%, −10%; 48 to 440 Hz; 120 VA max
Weight: Net, 5.9 kg (13 lb); shipping, 8.0 kg (18 lb)
Size: 212.3 mm W × 89 mm H × 450 mm D (8.36 in × 3.5 in × 17.7 in)

Ordering Information	Price	
HP 8116A Programmable Pulse/Function Generator*	$4,745	☎
Opt 001 Burst and Logarithmic Sweep	+$560	
Opt 910 Extra Operating & Service Manual	+$42	
Opt 1BP Mil Std 45622A Calibration	$460	
Extended warranty options (see page 663) available on request		
HP 5062-4001 Bail Handle Kit	$40	☎
HP 5062-3972 Rack Mount Kit (single HP 8116A)	$60	☎
HP 5062-3974 Rack Mount Kit (two instruments)	$35	☎
HP 5061-9694 Lock Link Kit (for use with HP 5062-3974)	$45	☎

For rack mounting, contact factory.
*HP-IB cables not supplied, see page 99.

☎ For off-the-shelf shipment, call 800-452-4844.

For the most current prices and product information, contact your local Hewlett-Packard sales office—see page 691.

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

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