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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP 8080A SO4 Pulse Generator Modular Mainframe

The Keysight/Agilent/HP 8080A SO4 is a modular mainframe pulse generator engineered for precise characterization of high-speed digital circuits and systems. This platform generates simultaneous 1 GHz clock signals and NRZ data with complementary streams up to 64 bits, delivering sub-nanosecond timing accuracy across sub-nanosecond ICs, fiber optics, and nucleonics applications. Interchannel delay: ± 9.9 ns, adjustable in 0.1 ns steps Output Performance (50-ohm load, per channel) Modular architecture accepts plug-in rate generators, delay generators, and output amplifiers Factory systemized configurations available; users may integrate custom systems with supplied Systemizing Guide (publication 5952-9546)

**MODEL****Keysight / Agilent /
HP 8080A SO4****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****8080A SO4****LISTING**<https://aumictechlabs.com/products/8080a-so4-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight/Agilent/HP 8080A SO4 is a modular mainframe pulse generator engineered for precise characterization of high-speed digital circuits and systems. This platform generates simultaneous 1 GHz clock signals and NRZ data with complementary streams up to 64 bits, delivering sub-nanosecond timing accuracy across sub-nanosecond ICs, fiber optics, and nucleonics applications. Technical Specifications Signal Generation & Timing Simultaneous 1 GHz

clock and simulated NRZ data generation Complementary data patterns up to 64 bits Repetition rate: 100 Hz to 1 GHz Transition times (10% to 90%): <300 ps Interchannel delay: ± 9.9 ns, adjustable in 0.1 ns steps Output Performance (50-ohm load, per channel) Amplitude: 0.6 V to 1.2 Vpp Offset: ± 1.2 V Output impedance: 50 ohms Selectable polarity and Normal/Complement formats Pulse width modes: RZ (square wave) and NRZ Cycle Modes & Control Operating modes: Int, Ext/Manual Width, Gate, Manual Extended cycle support: Ext/Man Single, Gated Cycle, Auto Cycle Channel B divider: Selectable 0.5 f for NRZ simulation Environmental & Power Operating temperature: 0°C to 55°C Power: 115/230 Vrms ($\pm 10\%$, -22%), 48–66 Hz, 200 VA max Mainframe dimensions: 133 mm H $\times$ 426 mm W $\times$ 422 mm D Weight (mainframe + full modules): 9.4 kg net Key Features Modular architecture accepts plug-in rate generators, delay generators, and output amplifiers Compatible modules: HP 8081A, 8083A, 8084A, 8091A, 8092A, 8093A Each output drives one 8080A module Factory systemized configurations available; users may integrate custom systems with supplied Systemizing Guide (publication 5952-9546) Single- and multi-channel pulse generator (Series S) and data generator (Series D) configurations Typical Applications Sub-nanosecond IC characterization High-speed digital circuit validation Fiber optic system testing Precision timing and pulse generation requiring fast edge transitions

8080ASO4 Characteristics / Specifications

PARAMETER	VALUE
Model	8080A SO4
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Pulse Generator Modular Mainframe
Alias	8080A; 8080A SO4; HP 8080A
Function	modular pulse generator mainframe
Configuration	SO4
Family	HP 8080A pulse plugins
Related E8305A	250 MHz PPG (different product)
Form	mainframe/host
Plugins	808xx pulse/output modules
NotAHead	mainframe not an output plugin
Status	HP 8080A EOL
Interface	HP-IB on later 8080 configurations (confirm)
Documentation	8080A operating/SO4
Power	mains mainframe
Cooling	mainframe fans
Use	host pulse plugins
Identification	8080A SO4
Compatibility	8080A-family plugins
Timing	mainframe timebase/rate generator
Outputs	from installed plugins
Installation	plugin card cage
Safety	high-voltage pulse heads possible
Calibration	system with installed heads
Not 8110A	different PPG family Notes Modular pulse mainframe identity from HP 8080A with SO4 configuration. Pulse width/amplitude come from

PARAMETER

VALUE

installed 808xx heads. Confirm SO4 option meaning on the unit label.

8080ASO4 Specifications

PARAMETER	VALUE
HP Agilent 8080A SO4 Pulse Generator Modular Mainframe	Overview
Key Features	- 8080A modular mainframe
Technical Specifications	Model: 8080A SO4

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	8080A S04
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Pulse Generator Modular Mainframe
Specifications	
PARAMETER	VALUE
Alias	8080A; 8080A S04; HP 8080A
Function	modular pulse generator mainframe
Configuration	S04
Specifications	
PARAMETER	VALUE
Family	HP 8080A pulse plugins
Related E8305A	250 MHz PPG (different product)
Form	mainframe/host
Specifications	
PARAMETER	VALUE
Plugins	808xx pulse/output modules
NotAHead	mainframe not an output plugin
Status	HP 8080A EOL
Specifications	
PARAMETER	VALUE
Interface	HP-IB on later 8080 configurations (confirm)
Documentation	8080A operating/S04
Power	mains mainframe

Specifications

PARAMETER	VALUE
Cooling	mainframe fans
Use	host pulse plugins
Identification	8080A S04

Specifications

PARAMETER	VALUE
Compatibility	8080A-family plugins
Timing	mainframe timebase/rate generator
Outputs	from installed plugins

Specifications

PARAMETER	VALUE
Installation	plugin card cage
Safety	high-voltage pulse heads possible
Calibration	system with installed heads

Not 8110A: different PPG family

Notes

Modular pulse mainframe identity from HP 8080A with S04 configuration. Pulse width/amplitude come from installed 808xx heads. Confirm S04 option meaning on the unit label.

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

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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.