

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP E8305A 250 MHz Pulse Pattern Generator

Agilent E8305A 250 MHz Pulse Pattern Generator The Agilent E8305A is a 250 MHz pulse/pattern generator with SCPI remote control (programming guide E8305-91010). Used as a modular/system pulse source for ATE digital and mixed-signal stimulus. Specifications chapter in the user/programming manual lists timing and level details for the installed configuration. 250 MHz class pulse stimulus; pattern generation for digital ATE; SCPI automated timing tests; complement to VXI/system hosts. The Agilent E8305A is a 250 MHz pulse/pattern generator with SCPI remote control (programming guide E8305-91010). Used as a modular/system pulse source for ATE digital and mixed-signal stimulus. Specifications chapter in the user/programming manual lists timing and level details for the installed configuration. 250 MHz class pulse stimulus; pattern generation for digital ATE; SCPI automated timing tests; complement to VXI/system hosts.



MODEL

**Keysight / Agilent /
HP E8305A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E8305A

LISTING

<https://aumictechlabs.com/products/e8305a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight/Agilent/HP E8305A is a 250 MHz Pulse Pattern Generator housed in a VXI C-size, single-slot module for integration into VXI mainframe systems. This dual-channel instrument

delivers precise pulse parameter control across a 1 MHz to 250 MHz frequency range, making it suitable for high-speed digital circuit characterization, signal integrity analysis, and component testing across TTL, CMOS, ECL, PECL, LVDS, and GTL logic technologies. Technical Specifications Maximum Frequency: 250 MHz Frequency Range: 1 MHz to 250 MHz Channels: 2 Data Pattern Memory: 16 kbit per channel, user-defined Pattern Formats: Pseudo-Random Binary Sequence (PBRs, $n = 7$ to 14); Return-to-Zero (RZ) and Non-Return-to-Zero (NRZ) Pulse Parameters: Glitch and dropout-free variation of pulse width and delay with timing calibration for enhanced DUT characterization accuracy Key Features VXI form factor supports direct integration into existing mainframe systems Identical programming syntax and pattern capabilities to the 81110A and other VXI Pulse Pattern Generators SCPI command structure via VXIplug&play drivers with Passthrough Functions Logic technology support spans legacy (TTL, CMOS, ECL) and modern (PECL, LVDS, GTL) standards Timing calibration feature enhances measurement precision during device characterization Typical Applications High-speed digital circuit testing and validation Signal integrity analysis Component and subassembly characterization Production test environments requiring modular, scalable solutions Compatibility & Integration The E8305A operates within VXI mainframe systems and requires VXIplug&play driver installation on the control PC. Documentation and drivers are supplied via Part No. E8305-10011. The instrument operates indoors at Installation Category II, Pollution Degree 2, with maximum relative humidity of 95% and altitude operation up to 2000 meters. Safety Class 1 designation with protective earth terminal; all LEDs are Class 1 per IEC 60825-1.

Features & description

From manufacturer datasheet

Features

- 250 MHz pulse/pattern generator

E8305A Characteristics / Specifications

PARAMETER	VALUE
Model	E8305A
Manufacturer	Agilent / Hewlett Packard / Keysight
Instrument Type	Pulse Pattern Generator
Alias	E8305A; Agilent E8305A
Maximum Rate	250 MHz
Function	pulse and pattern generation
Remote	SCPI
Manual PN	E8305-91010
Trigger Modes	programmable (SCPI trigger subsystem)
Levels	programmable HIGH/LOW voltage (example :VOLTage:HIGH)
Form	Agilent system/modular pulse generator
Related 8080A	modular pulse mainframe (this catalog SO4)
Related 8110A	benchtop 150/330 MHz class PPG family
Host	system controller via GPIB/SCPI
Channels	configuration-dependent (confirm faceplate)
Output	pulse/pattern coaxial outputs
Clock	internal/external per programming guide
Memory	pattern memory per configuration
Status	Agilent E8305A EOL
Software	SCPI 1990s Agilent pulse family
Power	mains/host per nameplate
NotAScope	generator not digitizer
Not E1434A	that is VXI 65 kSa/s arbitrary source
Documentation	E8305A programming/specifications chapters
Calibration	timing/level cal

PARAMETER	VALUE
Use	digital stimulus
Safety	observe output swing into 50 ohm Notes 250 MHz pulse/pattern generator identity from Agilent E8305A programming guide E8305-91010. Channel count exact amplitude window and jitter numbers are in Chapter 3 Specifications of that manual for the installed options: read the unit configuration rather than inventing picosecond jitter.

E8305A Specifications

PARAMETER	VALUE
Agilent E8305A 250 MHz Pulse Pattern Generator	Overview
Applications	250 MHz class pulse stimulus; pattern generation for digital ATE; SCPI automated timing tests; complement to VXI/system hosts.
Key Features	- 250 MHz pulse/pattern generator
Technical Specifications	Model: E8305A

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 chapter in the user/programming manual lists timing and level details for the installed configuration.

Applications

250 MHz class pulse stimulus; pattern generation for digital ATE; SCPI automated timing tests; complement to VXI/system hosts.

Key Features

- 250 MHz pulse/pattern generator
- Full SCPI command set (voltage high/low, trigger modes)
- Remote programming reference E8305-91010
- Contrast with 8110A/81110A benchtop PPGs and 8080A modular pulse mainframe

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	E8305A
Manufacturer	Agilent / Hewlett Packard / Keysight
Instrument Type	Pulse Pattern Generator

Specifications

PARAMETER	VALUE
Alias	E8305A; Agilent E8305A
Maximum Rate	250 MHz
Function	pulse and pattern generation

Specifications

PARAMETER	VALUE
Remote	SCPI
Manual PN	E8305-91010
Trigger Modes	programmable (SCPI trigger subsystem)

Specifications

PARAMETER	VALUE
Levels	programmable HIGH/LOW voltage (example :VOLTage:HIGH)
Form	Agilent system/modular pulse generator

PARAMETER	VALUE
Related 8080A	modular pulse mainframe (this catalog S04)

Specifications

PARAMETER	VALUE
Related 8110A	benchtop 150/330 MHz class PPG family
Host	system controller via GPIB/SCPI
Channels	configuration-dependent (confirm faceplate)

Specifications

PARAMETER	VALUE
Output	pulse/pattern coaxial outputs
Clock	internal/external per programming guide
Memory	pattern memory per configuration

Specifications

PARAMETER	VALUE
Status	Agilent E8305A EOL
Software	SCPI 1990s Agilent pulse family
Power	mains/host per nameplate

Specifications

PARAMETER	VALUE
NotAScope	generator not digitizer
Not E1434A	that is VXI 65 kSa/s arbitrary source
Documentation	E8305A programming/specifications chapters

Specifications

PARAMETER	VALUE
Calibration	timing/level cal
Use	digital stimulus
Safety	observe output swing into 50 ohm

Notes

250 MHz pulse/pattern generator identity from Agilent E8305A programming guide E8305-91010. Channel count exact amplitude window and jitter numbers are in Chapter 3 Specifications of that manual for the installed options: read the unit configuration rather than inventing picosecond jitter.

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
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.