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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight EXR258A

Agilent Keysight EXR258A Infiniium EXR-Series Oscilloscope The Keysight EXR258A is an Infiniium EXR-Series oscilloscope with 2.5 GHz analog bandwidth on 8 channels and 16 GSa/s sample rate on every channel. OEM EXR data sheets list 10-bit ADC resolution (up to 16-bit high-resolution), 100 Mpts/ch standard memory, and optional 16 digital MSO channels. High-speed digital debug, multi-lane serial analysis, power integrity, and general-purpose high-bandwidth multi-channel capture. Sample Rate Real Time: 16 GSa/s all analog channels The Keysight EXR258A is an Infiniium EXR-Series oscilloscope with 2.5 GHz analog bandwidth on 8 channels and 16 GSa/s sample rate on every channel. OEM EXR data sheets list 10-bit ADC resolution (up to 16-bit high-resolution), 100 Mpts/ch standard memory, and optional 16 digital MSO channels. High-speed digital debug, multi-lane serial analysis, power integrity, and general-purpose high-bandwidth multi-channel capture. Sample Rate Real Time: 16 GSa/s all analog channels Vertical Resolution: 10 bits up to 16 bits with high resolution mode



MODEL

**Agilent / Keysight
EXR258A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

EXR258A

LISTING

<https://aumictechlabs.com/products/exr258a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight EXR258A is an 8-channel real-time oscilloscope delivering 2.5 GHz bandwidth and 16 GSa/s sample rate across all analog channels simultaneously. This 7-in-1 instrument integrates logic analysis, protocol analysis, arbitrary waveform generation, frequency response analysis,

digital voltmeter, and counter functionality into a single platform. Built for R&D, manufacturing, and field testing in wireless, aerospace, and defense sectors.

Technical Specifications

Bandwidth: 2.5 GHz (upgradeable) Analog Channels: 8 Digital Channels: 16 Maximum Sample Rate: 16 GSa/s on all channels simultaneously Memory Depth: 100 Mpts/channel standard; upgradeable to 400 Mpts/channel or 1.6 Gpts/channel ADC Resolution: 10-bit standard, upgradeable to 16-bit high-resolution mode Waveform Update Rate: >200,000 wfm/s System ENOB: Up to 9.0 bits (8.1 bits typical) Noise Floor: As low as 43 μ V Display: 15.6-inch capacitive color touch screen, 1920×1080 Full HD resolution

Key Features

Multi-touch interface with setup wizards for common measurements, trigger/decode configurations, eye diagrams, power analysis, power integrity, and jitter decomposition Fault Hunter expert system for automatic error evaluation against user-defined criteria Flexible channel configuration: 8 analog + 16 digital logic analysis channels Arbitrary waveform generator at 50 MHz (optional) Frequency response analyzer at 50 MHz (optional) Protocol analyzer (optional) Bode plotter (optional) Standard 4-digit digital voltmeter and 10-digit counter High waveform capture rate enables detection of rare and intermittent events Memory depth scaling supports extended signal observation windows

Typical Applications

Wireless communication design and validation Aerospace and defense signal characterization High-speed digital protocol debugging Power integrity and signal integrity analysis Jitter and timing measurements Arbitrary waveform generation and frequency response testing

Compatibility & Integration

Keysight I/O libraries suite included for instrument control and data integration.

EXR258A Characteristics / Specifications

PARAMETER	VALUE
Model	EXR258A
Analog Bandwidth 50 Ohm	2.5 GHz
Analog Bandwidth 1 MOhm	500 MHz
Analog Channels	8
Sample Rate Real Time	16 GSa/s all analog channels
Sample Resolution	62.5 ps
Vertical Resolution	10 bits up to 16 bits with high resolution mode
ENOB Class	as high as 9.0
Standard Memory Depth	100 Mpts per channel
Typical Rise Time 10/	172 ps
Typical Rise Time 20/	124 ps
Real Time Update Rate	greater than 200000 waveforms per second
Digital Logic Channels Optional	16 dedicated MSO input
Display	15.6 inch touch full HD dual screen support
Input Impedance 50 Ohm	50 ohm plus or minus 3.5 percent
Input Impedance 1 MOhm	1 MOhm plus or minus 1 percent (14 pF typical)
Series Family	Infiniium EXR-Series
Brand Lineage	Agilent / Keysight
Form Factor	benchtop InfiniiumEye Diagram Speed Class: greater than 750000 UI/s
Bandwidth Upgrade Path	field upgradeable up to 6 GHz
Channel Upgrade Path	already 8 analog channels
Bandwidth	50 Ohm: 2.5 GHz
Rise Time	10/90: 172 ps

EXR258A Specifications

PARAMETER	VALUE
Key Features	2.5 GHz bandwidth on all analog channels
Technical Specifications	Model: EXR258A
Notes	From Keysight Infiniium EXR-Series data sheet model table for EXR258A.

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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Sample Resolution	62.5 ps
Vertical Resolution	10 bits up to 16 bits with high resolution mode
ENOB Class	as high as 9.0
Standard Memory Depth	100 Mpts per channel
Optional Memory 400 Mpts: 400 Mpts per channel option path	
Optional Flexible Memory: 1.6 Gpts combined flexible memory option path	
Specifications	
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Typical Rise Time 10/90	172 ps
Typical Rise Time 20/80	124 ps
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Notes

From Keysight Infiniium EXR-Series data sheet model table for EXR258A.

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.