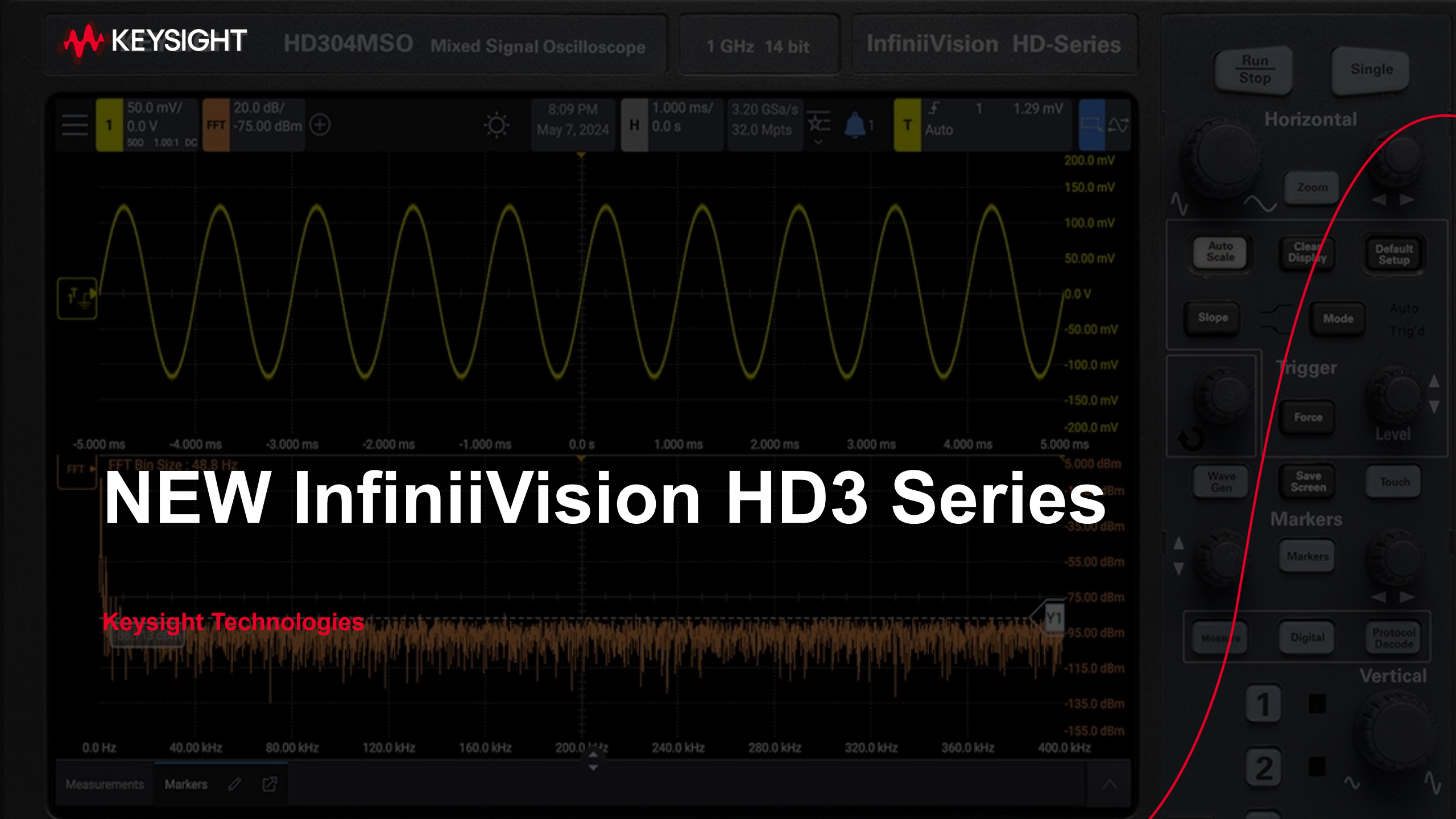
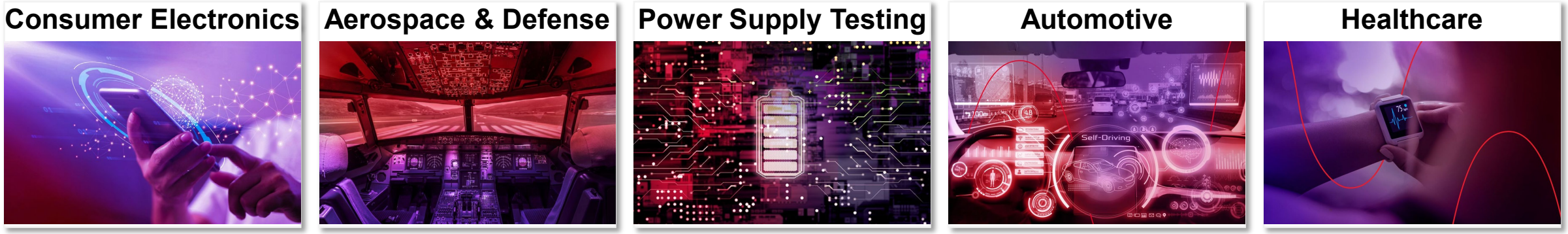


NEW InfiniiVision HD3 Series

Keysight Technologies

Designs are Becoming More Complex, Using Signals that are Increasingly Smaller



Device and component designs are becoming more complex, using signals that are increasingly smaller. To ensure product quality and maximize product yields, engineers must troubleshoot designs by tracing multiple signals at once to identify the smallest signal errors that indicate design flaws and hardware defects. Engineers need an oscilloscope that can measure the smallest and most infrequent signal glitches beyond the noise to correct product issues.

Down-Deploying Advanced Technology, Making Precision Portable

Infiniium UXR Series

5 GHz to 110 GHz

Infiniium MXR/EXR Series

500 MHz to 6 GHz

InfiniiVision HD3 Series

200 MHz to 1 GHz

NEW!

Introducing the InfiniiVision HD3 Series

Portable Precision

- Bandwidths: 200 MHz to 1 GHz
- Offers many of the features people love about InfiniiVision oscilloscopes with significantly **more testing power**

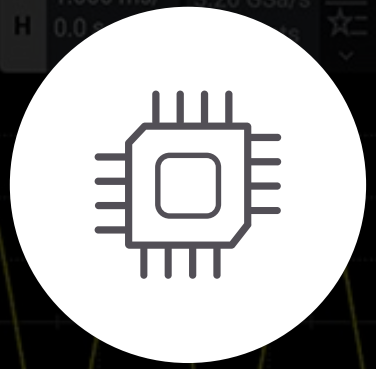
High signal integrity with strong combination of
ADC + noise + memory + update rate:

- **4x more vertical accuracy** with 14-Bit ADC vs. 12-bit ADC (native 14-bit ADC, 16 bits hi res!)
- **Half the noise floor**
- Deep memory with 100 Mpts (25x more memory than 3000G)
- **Uncompromised** waveform update rate of 1.3M waveforms / second

KEYSIGHT

Portable Precision

- Analyze the smallest signals in your design with the **highest accuracy**
- **High vertical resolution** (ADC and ENOB)
- **Low noise** front-end



Custom Technology

- Custom components **optimized for oscilloscope measurements**
- New **deep memory** architecture
- **Hardware-based everything** – zone, serial, mask
- **Fault Hunter**

Versatile Functionality

- Dive deeper with **more flexibility** in the user interface
- Immediate license upgrade – **no return to factory**
- From power integrity to medical imaging to general debugging, HD3 provides a high degree of accuracy

Portable Precision

Analyze with the Highest Accuracy

Custom Technology

High ADC and ENOB

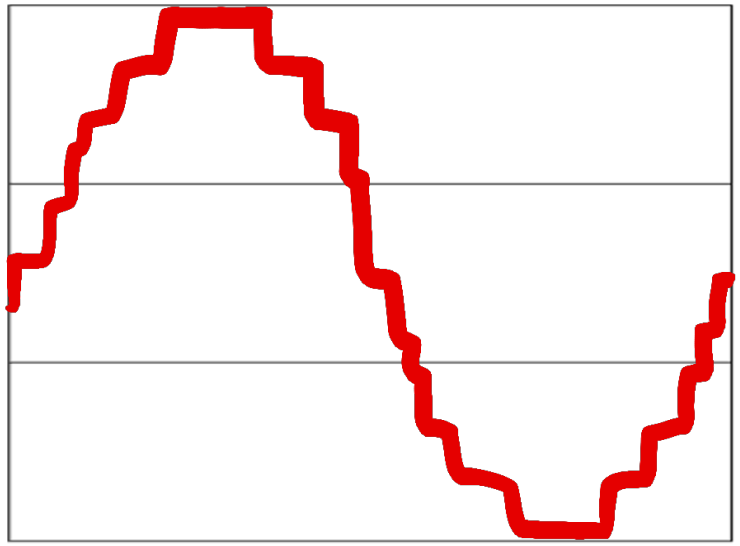
Versatile Functionality

Low Noise Front-End

Analyze with the Highest Accuracy

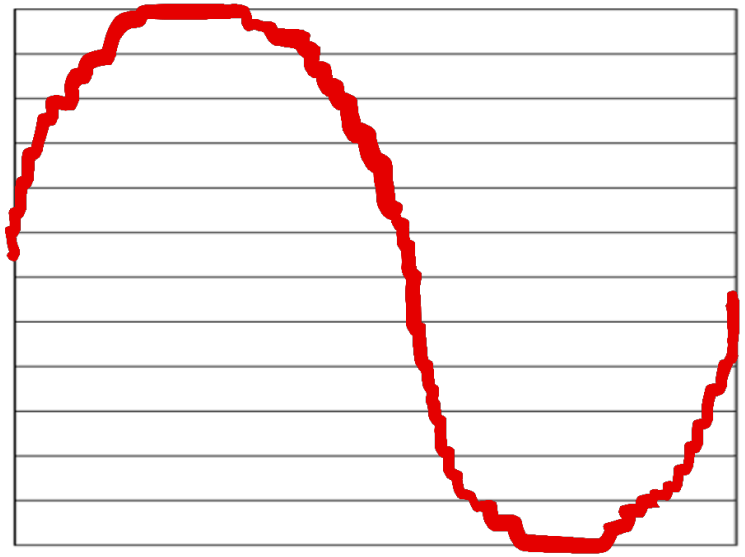
8 bits

256 Q-Levels



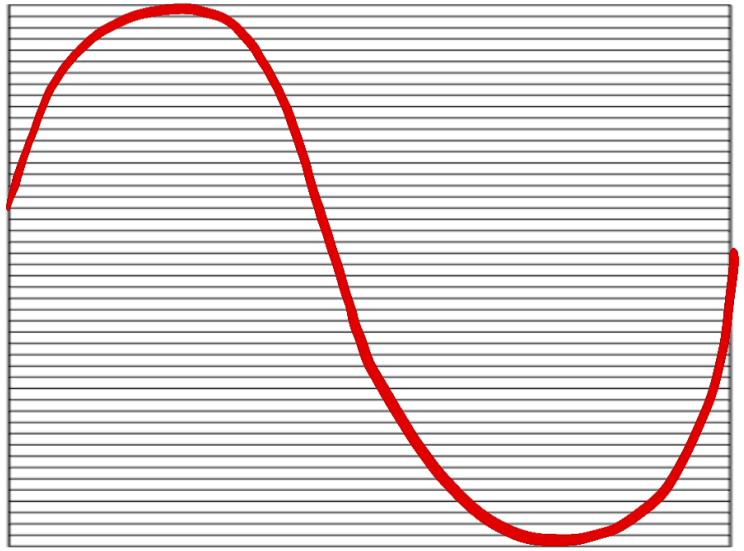
12 bits

4,096 Q-Levels



14 bits

16,384 Q-Levels



High ENOB

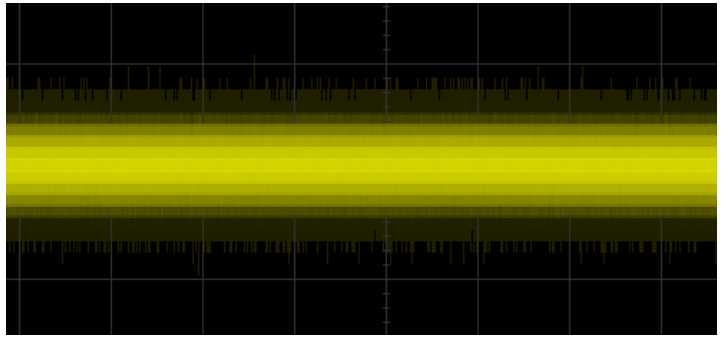
Max ENOB

HD3 Series	>10.4 bits
Closest Competitor Spec	8.9 bits
Keysight 3000G/4000G	6.9 bits

KEYSIGHT

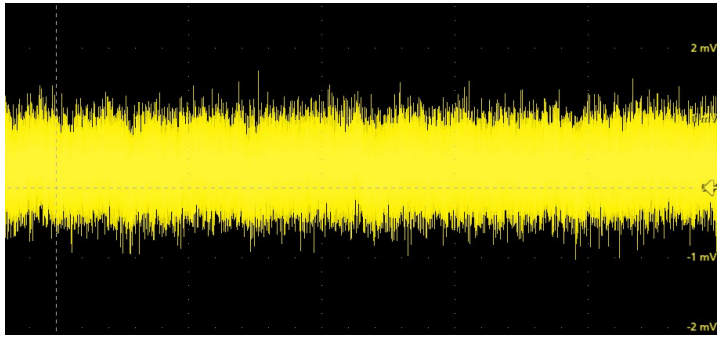
Low Noise Front-End

3000G X-Series



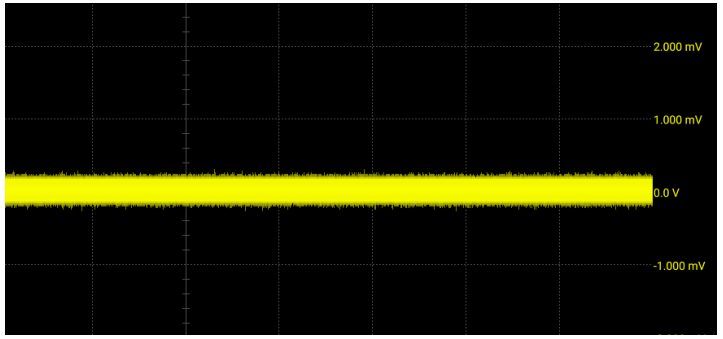
277 μV_{RMS}

Other Oscilloscopes



>280 μV_{RMS}

HD3 Series

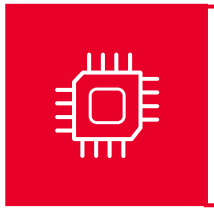


31.5 μV_{RMS}

Significantly lower noise floor than other general-purpose oscilloscopes

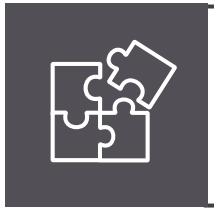
Portable Precision

Optimized for Scope Measurements



Custom Technology

Deep Memory Architecture



Versatile Functionality

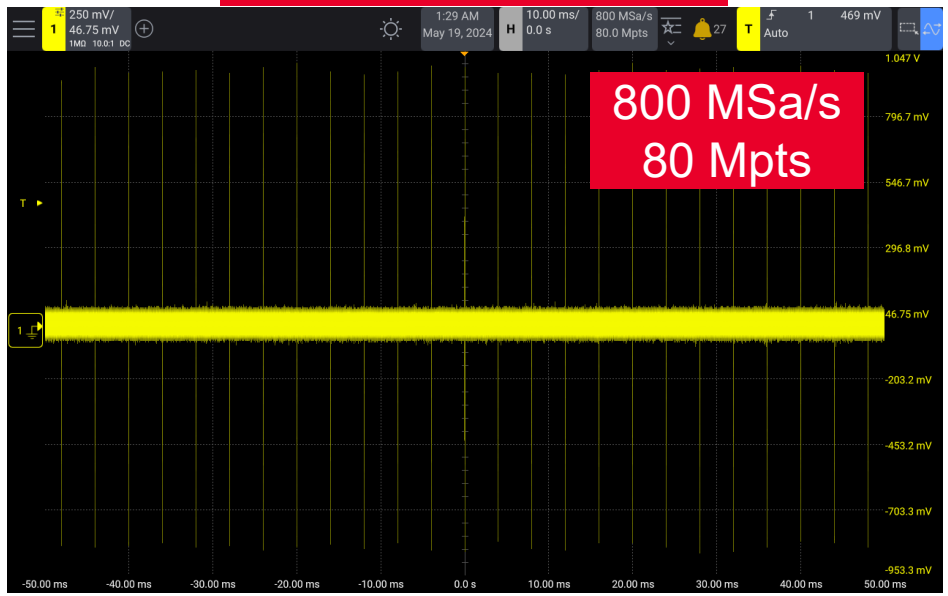
New Software Technology

Optimized for Oscilloscope Measurements

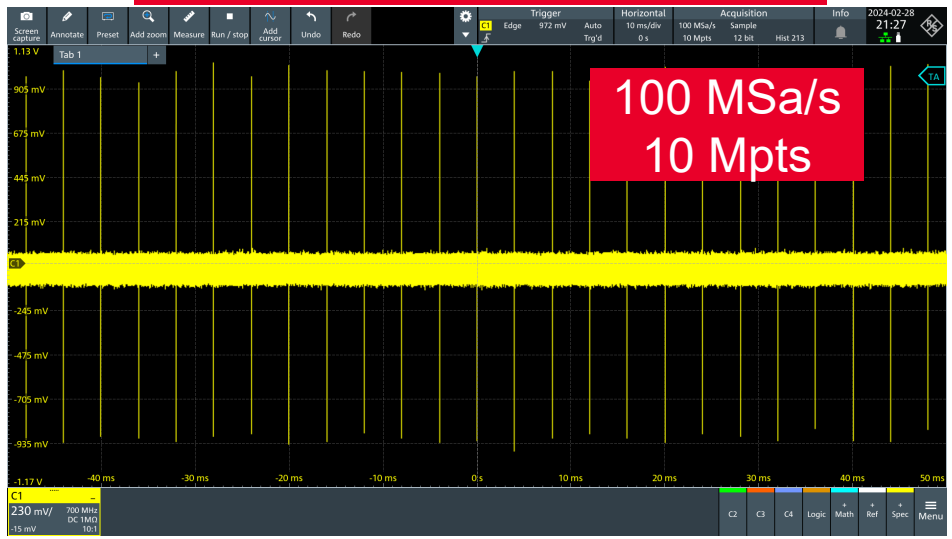
By developing **custom components rather than utilizing off-the-shelf parts**, the HD3 Series offers:

- High sample rate and memory under typical testing conditions
- Uncompromised waveform update rate
- High vertical resolution, maximizing use of the ADC
- Hardware-based functions: mask, zone, serial, etc.

Keysight HD3 Series



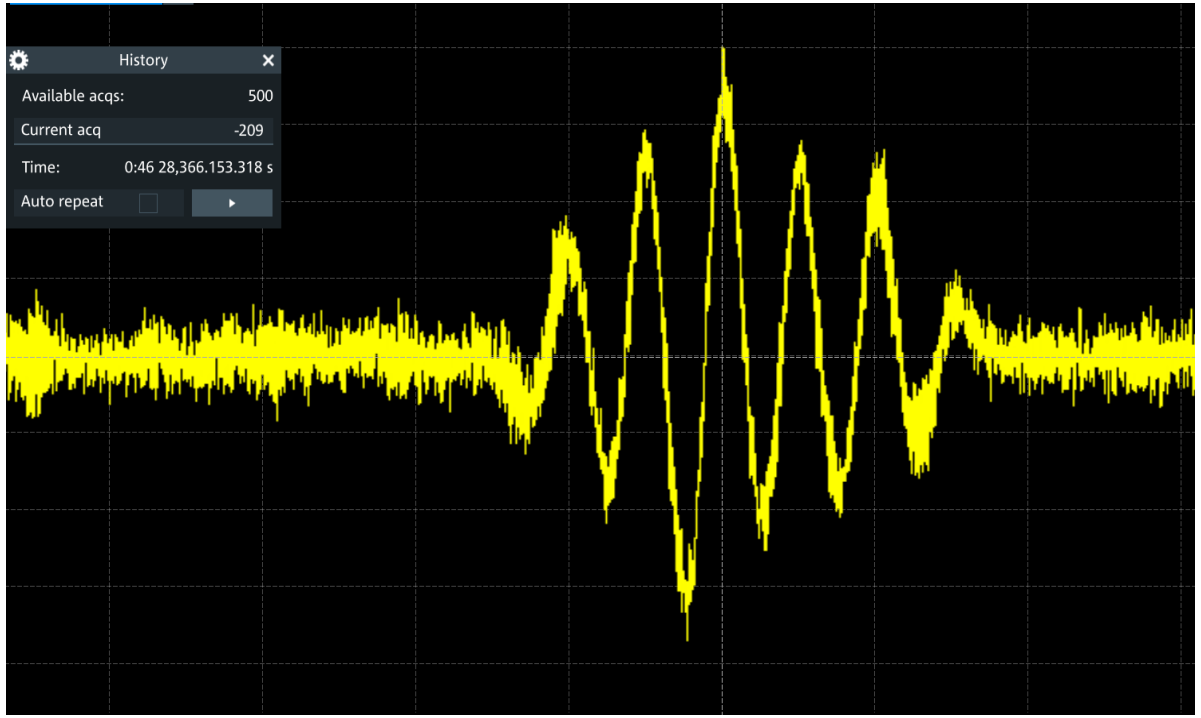
General-Purpose Oscilloscopes



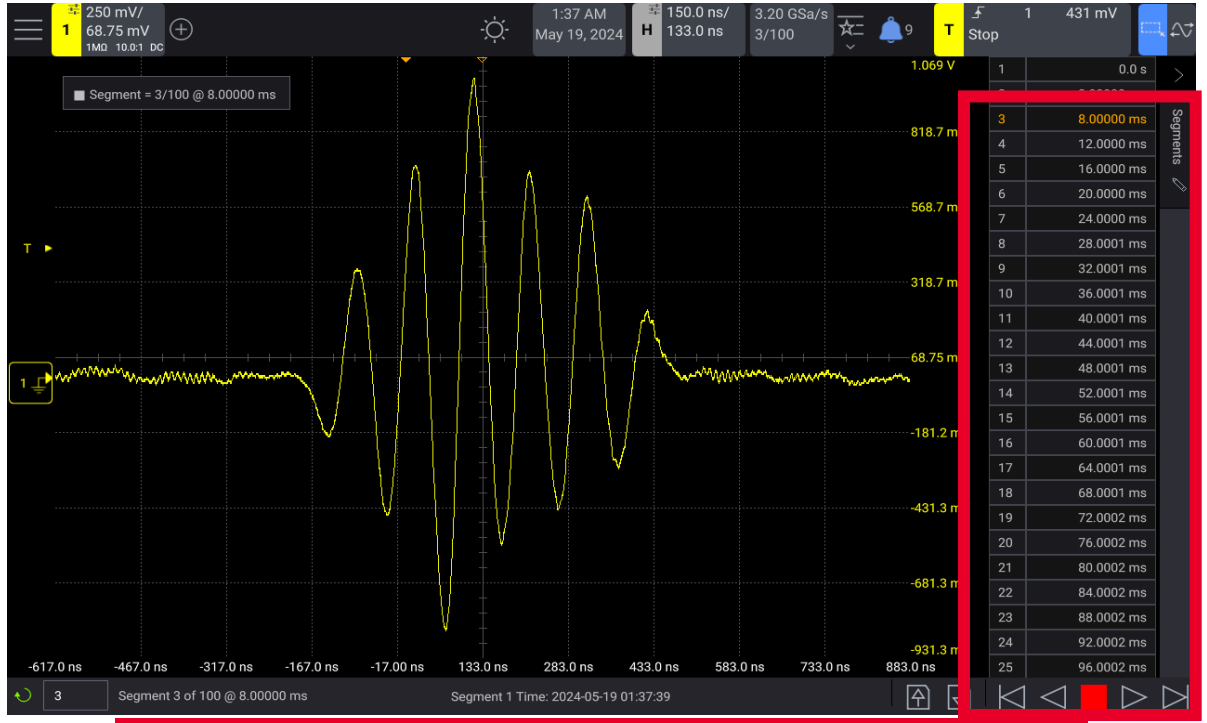
KEYSIGHT

Deep Memory Architecture

Extends memory to the Gpts with segmented memory and a time-correlated list



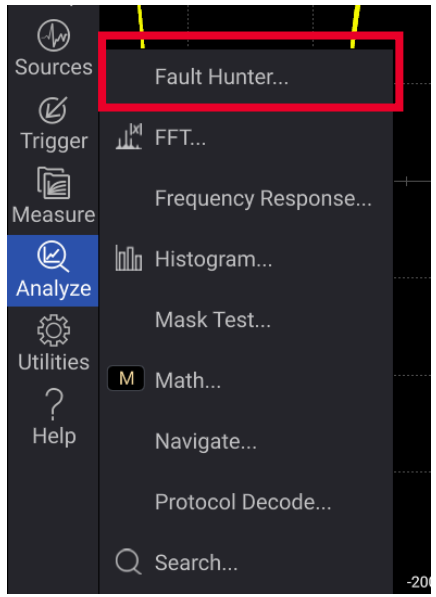
General-Purpose Oscilloscopes

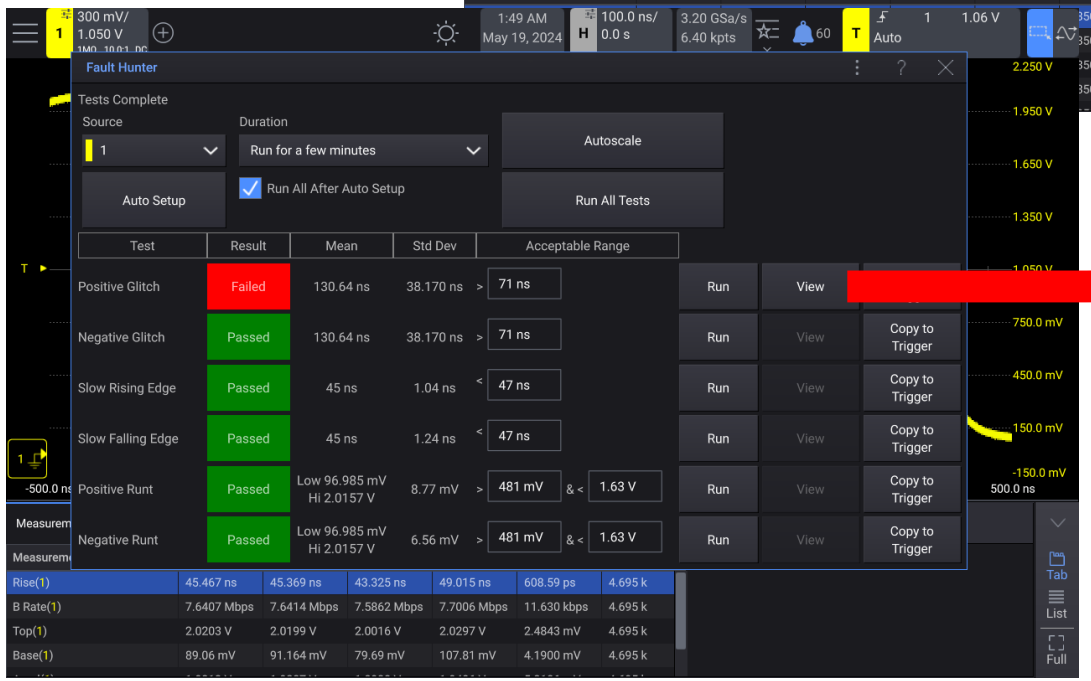


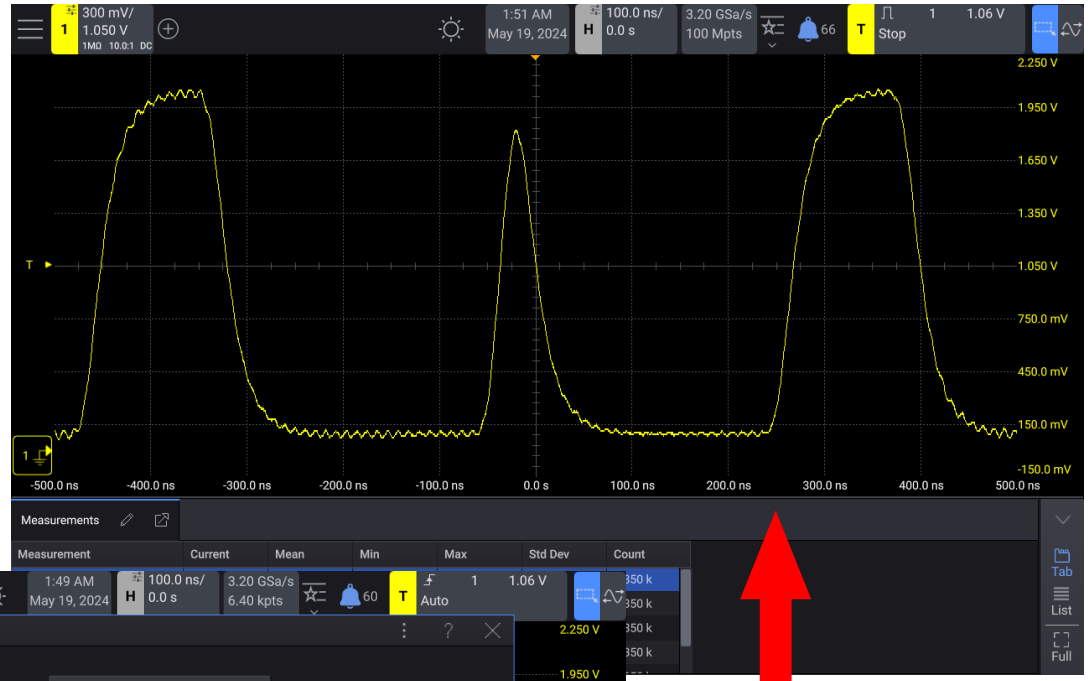
Keysight HD3 Series with time-correlated list

New Software Technology

- Fault Hunter Software!
- The perfect tool for general debugging
- Analyze glitches, slow edges, and runts while you do other work







Portable Precision

Custom Technology

Versatile Functionality

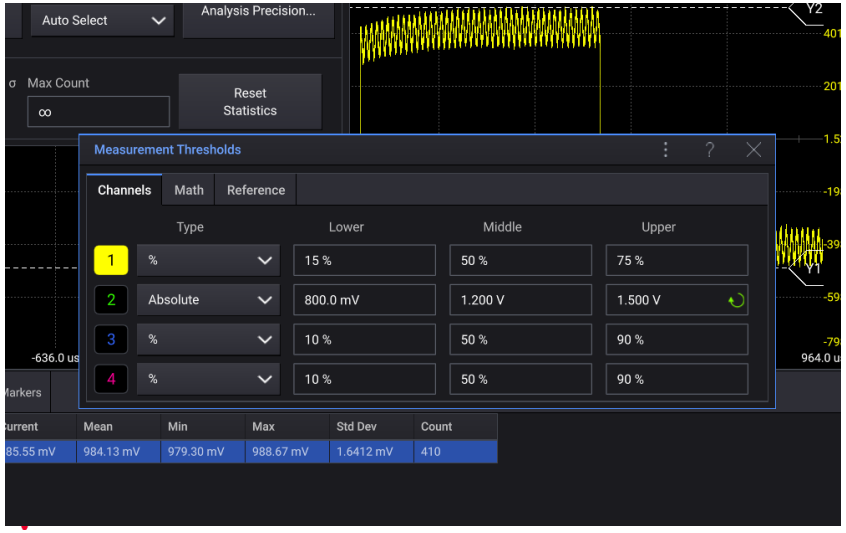
New GUI Flexibility

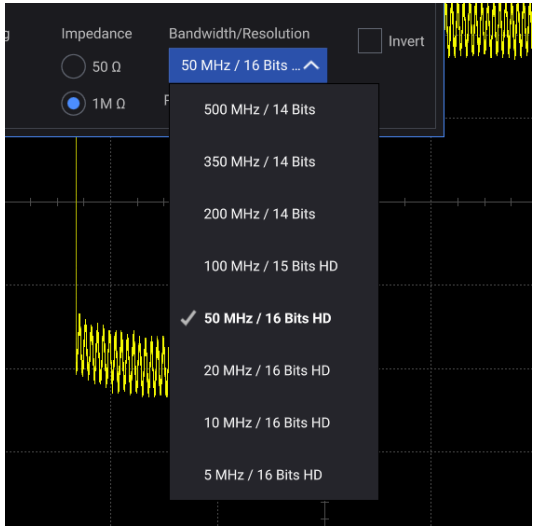
Immediate License Upgrades

Support for Key Industries

New User Interface Flexibility

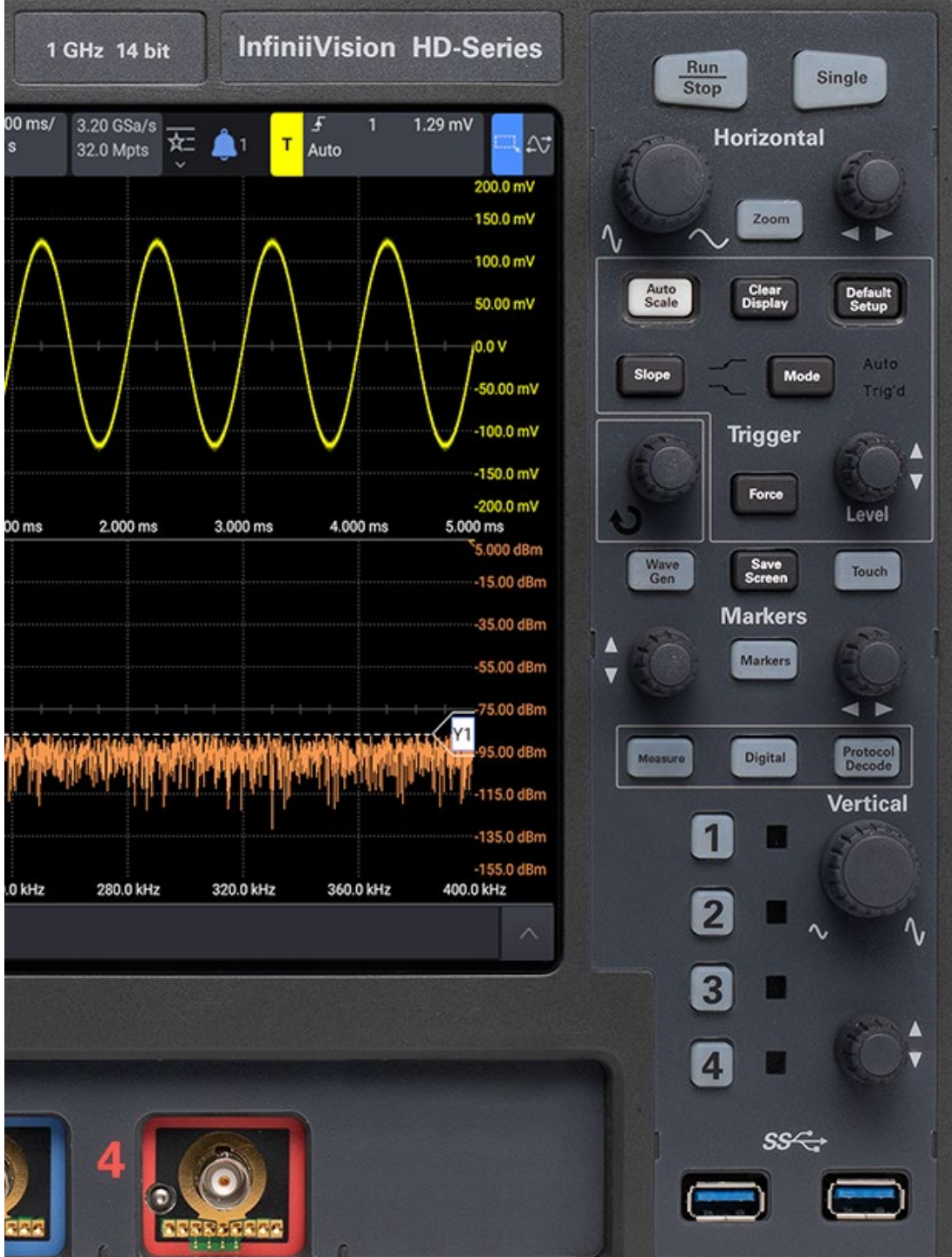
- Split grids - utilize full ADC and vertical resolution for every channel
- Several bandwidth limit options – enables HD mode
- Custom measurement thresholds





Immediate Bandwidth & Memory Upgrades

- Bandwidths: 350 MHz, 500 MHz, 1 GHz
- Memory Options: 50 Mpts, 100 Mpts
- Pre-purchase bandwidth options (i.e. HD304MSO-500)
- Post-purchase bandwidth upgrades (i.e. HD3BW-009)

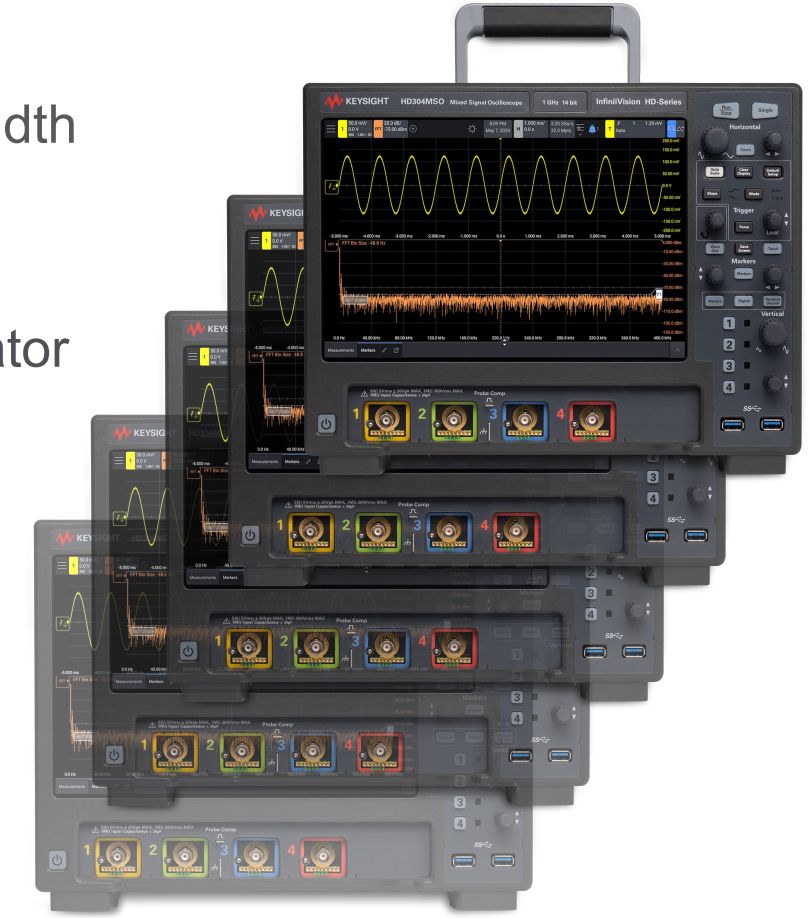


KEYSIGHT

Immediate License Upgradability

Software Upgrades

- ✓ 200 MHz to 1 GHz bandwidth
- ✓ 20 to 100 Mpts memory
- ✓ 100 MHz Function Generator (HD3WAVEGEN)
- ✓ Protocol decode/trigger (HD3EMBA, HD3AUTA)
- ✓ Application support
- ✓ Warranty, services



Included Standard

- ✓ Frequency Response Analysis
- ✓ Fault Hunter
- ✓ Zone trigger
- ✓ Segmented Memory
- ✓ MSO License
- ✓ Mask Testing
- ✓ Histograms, FFT, and more!

Supporting Development and Manufacturing With Key Customer Types

- Semiconductor design
- Automotive systems
- Smart phones/wireless communications
- Consumer electronics
- Power management
- Industrial automation
- Healthcare technology and medical imaging
- Smart home, building automation, smart appliances, other IoT
- Memory architecture
- Computer components
- Microcontrollers
- Visual recognition technology
- Audio technology
- Government defense technologies: wireless devices, tactical electronic systems, antennas, radar systems, etc.

HD3 Industry Demands

Consumer Electronics

Challenge: Quickly realizing signal integrity issues to produce a quality product

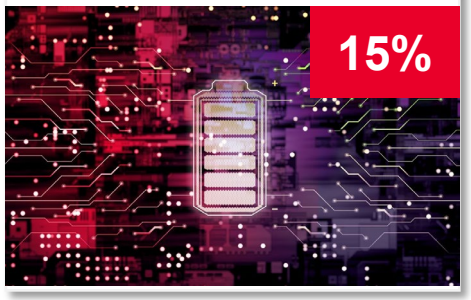
Solution: Enhance error and rare event detection in small signals with portable precision that features a 14-bit ADC with 4x more vertical accuracy than a 12-bit ADC and a fast waveform update rate

Aerospace & Defense

Challenge: Many of the same challenges as consumer electronics but with A&D protocols used in the control interfaces and heightened security

Solution: Hardware-based serial protocol decoding, triggering, and zone trigger paired with a fast waveform update rate reduces dead time and captures infrequent communication errors

Power Supply Testing



Challenge: Measuring small AC signals over large DC signals

Solution: Increased dynamic range with a 14-bit ADC provides 4x more resolution than a 12-bit ADC, half the noise, and a power rail probe creates a portable system for detecting the smallest signals and ripples

Automotive

Challenge: Validating multiple buses at one time and ensuring proper communication between various transmitters, receivers, and sensors

Solution: Hardware-based decoding of automotive protocols, deep and segmented memory, and fast waveform update rate, enable identification of elusive glitches

Healthcare

Challenge: Measuring signals with extreme accuracy during troubleshooting, installation, and maintenance of medical devices

Solution: High signal integrity ensures portable precision for debugging medical wearables


KEYSIGHT