# Infiniium 9000 H-Series High-Definition Oscilloscopes

## See your signals in HD

The high-definition 9000 H-Series oscilloscope offers up to 12 bits of resolution, which represents 4096 quantization levels, for precision signal viewing. The 9000 H-Series' combination of hypersampling and linear noise reduction technology achieves a noise level up to three times lower than traditional 8-bit oscilloscopes. It is specifically engineered to provide low noise and high-dynamic-range measurement capability in key applications such as medical, automotive, consumer devices, and power analysis.







 File Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Coded Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI

 Image: Code Step Trigger Neauer Adv/or Utilities Demis Hulp
 7 De: 202 4-04 MI
</t

Zoomed in view of the top of a sine wave taken with scopes offering 8-bits versus 12-bits of resolution. 12-bit resolution provides more clarity and lower noise to increase precision signal viewing.



- $\circ~$  Reveal hidden signal detail with 16X more resolution and up to 3X less noise.
- · Comprehensive measurement capability
  - Get optional digital channels, more than 20 applications, and ultrasensitive current probes for a complete oscilloscope solution.

	DS09024H	DS09054H	DS09104H	DS09204H
Scope channels	4	4	4	4
Bandwidth	250 MHz	500 MHz	1 GHz	2 GHz (2-ch)
Sample rate	1.25 GSa/s	2.5 GSa/s	5 GSa/s	10 GSa/s
Standard memory (max)	100 Mpts	100 Mpts	100 Mpts	100 Mpts
Bits of resolution			12 bits at $\leq$ 500 MHz	12 bits at $\leq$ 500 MHz
	12 bits	12 bits	11 bits at 1 GHz	11 bits at 1 GHz
				10 bits at 2 GHz
MSO and app upgrades				



## Infiniium 9000 H-Series High-Definition Oscilloscopes

#### Applications

Model	Description
N5462A	RS-232/UART triggering and decode
N5391B	I <sup>2</sup> C/SPI triggering and decode
N8800B	RS-232, SPI and I <sup>2</sup> C triggering and decode bundle
N8803B	CAN, LIN, and FlexRay triggering and decode
N5415B	InfiniiScan
N5430A	User-defined function
N5452A	Application remote programming interface
U1882A	Power measurement application software
N5397A	Xilinx FPGA dynamic probe
N8817A	JTAG triggering and decode
N8900A	InfiniiView oscilloscope analysis software
N5467A	User-definable application
N5392A	Ethernet compliance (10/100/1000T) application
N5416A	USB 2.0 compliance application

For more information about this oscilloscope, please visit www.agilent.com/find/9000H

#### **Options and accessories**

Model	Description
N2900A	Upgrade acquisition memory depth
N2901D	DS09024H/DS09054H to MS0 upgrade kit
N2901A	DS09154H to MSO upgrade kit
N2901B	DS09204H to MSO upgrade kit
N2902A	9000 Series oscilloscope rackmount kit
N2745A	Additional solid state drive (requires option 801 at time of purchase)

#### Recommended service options

Additional two years of Return-to-Agilent warranty Additional two years of Return-to-Agilent calibrations For more information go to **www.agilent.com/find/removealldoubt**  Probing systems can also cause measurement noise, so Agilent has developed a new series of low-noise probes specifically designed to allow engineers to view and analyze small-current signals. The new N2820A/N2821A Series AC/DC current probes offer the industry's highest sensitivity, going all the way down to 50  $\mu$ A, with a maximum current range of 5 A. These probes coupled with the 9000 H-Series scopes provide precise viewing of small currents.



### **Recommended probes**

Model	Description
N2873A	500 MHz passive probes (standard)
N2750A	1.5 GHz InfiniiMode active probe (optional)
N2751A	3.5 GHz InfiniiMode active probe (optional)
1130A	1.5 GHz InfiniiMax active probe (optional)
N2795A	1 GHz single-ended active probes (optional)
N2796A	2 GHz single-ended active probe (optional)
N2820A	High sensitivity 2-channel current probe, for wide dynamic range (optional)
N2821A	High sensitivity 1-channel current probe, for normal dynamic range (optional)
N2893A	100 MHz, 15 A AC/DC current probe (optional)

For a complete listing of available Agilent probes, see the *Agilent Probes and Accessories Selection Guide*, publication number 5989-6162EN.

For more details about Agilent probes and accessories for Infiniium oscilloscopes, see the *Infiniium Probes and Accessories Selection Guide*, publication number 5968-7141EN.

Technical data, availability, and pricing subject to change without notice. © Agilent Technologies, Inc. 2012, Printed in USA, December 13, 2012 5991-1415EN

