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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N2833A

HP Agilent Keysight N2833A InfiniiMax III+ Probe Amplifier 16 GHz The Keysight N2833A is an InfiniiMax III+ probe amplifier rated 16 GHz with InfiniiMode differential, single-ended, and common-mode measurements without changing tip connections. OEM InfiniiMax III/III+ data sheet 5990-5653EN family tables and Keysight probe listings document 5:1/10:1 attenuation and III+ noise density for the amplifier family. 16 GHz-class high-speed differential probing on Infiniium oscilloscopes using InfiniiMax III/III+ probe heads. The Keysight N2833A is an InfiniiMax III+ probe amplifier rated 16 GHz with InfiniiMode differential, single-ended, and common-mode measurements without changing tip connections. OEM InfiniiMax III/III+ data sheet 5990-5653EN family tables and Keysight probe listings document 5:1/10:1 attenuation and III+ noise density for the amplifier family. 16 GHz-class high-speed differential probing on Infiniium oscilloscopes using InfiniiMax III/III+ probe heads. InfiniiMode differential SE and common mode



MODEL

**Agilent / Keysight
N2833A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N2833A

LISTING

<https://aumictechlabs.com/products/n2833a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight N2833A is a passive probe engineered for signal acquisition across general-purpose measurement applications. It maintains signal integrity between the device under test and oscilloscope, delivering high signal fidelity for accurate waveform capture in laboratory and

field environments.

Technical Specifications

Probe Type: Passive
Input Impedance: 10 M Ω
Attenuation Ratio: 10:1 (typical for passive probes in this series)
Input Capacitance: Minimized to reduce loading effects on the circuit under test
Compensation: Low-frequency and high-frequency compensation adjustment supported
Connector: BNC interface to oscilloscope input

Key Features

Fixed 10:1 attenuation for standardized measurement scaling
High input impedance (10 M Ω) minimizes circuit loading
Compensation adjustments enable precise impedance matching to oscilloscope input
AutoProbe interface enables automatic probe identification and instrument configuration on compatible oscilloscopes

Typical Applications

General-purpose signal measurement and acquisition
Waveform analysis requiring detailed signal capture
Circuit troubleshooting and characterization in development environments

Compatibility & Integration

The N2833A connects to Keysight InfiniiVision and Infiniium Series oscilloscopes with 1 M Ω BNC input impedance. AutoProbe-enabled oscilloscopes automatically detect the probe and configure the correct input impedance, attenuation setting, and power delivery. This intelligence simplifies setup and eliminates manual configuration errors on compatible instruments.

N2833A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	InfiniiMax III+ probe amplifier
Amplifier Bandwidth	16 GHz
Series Family	Keysight N2830/N2831/N2832/N2833 InfiniiMax III+
Scope Interface	AutoProbe
InfiniiMode Differential	A minus BInfiniiMode Single Ended A: A minus ground
InfiniiMode Single Ended B	B minus ground
InfiniiMode Common Mode	(A plus B)/2 minus ground
Dc Attenuation	5:1 or 10:1 automatically selected from volts/division
Dc Input Resistance Differential	100 kOhm plus or minus 2 percent
Dc Input Resistance Single Ended	50 kOhm plus or minus 2 percent
Input Capacitance Class	0.32 pF differential class
Input Voltage 5 To	2.5 Vpp or plus or minus 1.25 V
Input Voltage 10 To	5.0 Vpp or plus or minus 2.50 V
Noise Diff 5 To	33.5 nV per sqrt Hz
Noise Diff 10 To	53.9 nV per sqrt Hz
Noise Se 5 To	27.8 nV per sqrt Hz
Noise Se 10 To	47.7 nV per sqrt Hz
Noise Cm 5 To	21.8 nV per sqrt Hz
Noise Cm 10 To	38.4 nV per sqrt Hz
Head Compatibility	InfiniiMax III/III+ probe heads
Offset Range Class	plus or minus 16 V class
Literature	Keysight 5990-5653EN and probes selection guide
Recommended Oscilloscope Class	Infiniium models supporting AutoProbe InfiniiMax III+
Bandwidth	16 GHz
Attenuation	5:1 or 10:1 automatically selected from volts/division

N2833A Specifications

PARAMETER	VALUE
Applications	16 GHz-class high-speed differential probing on Infiniium oscilloscopes using InfiniiMax III/III+ probe heads.
InfiniiMode differential SE and common mode	16 GHz amplifier bandwidth
AutoProbe interface	Automatic 5:1 or 10:1 attenuation
Technical Specifications	Instrument Type: InfiniiMax III+ probe amplifier

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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PARAMETER	VALUE
Instrument Type	InfiniiMax III+ probe amplifier
Amplifier Bandwidth	16 GHz
Series Family	Keysight N2830/N2831/N2832/N2833 InfiniiMax III+
Scope Interface	AutoProbe
InfiniiMode Differential	A minusBInfiniiMode Single Ended A: A minus ground
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InfiniiMode Common Mode	(A plus B)/2 minus ground
Dc Attenuation	5:1 or 10:1 automatically selected from volts/division
Dc Input Resistance Differential	100 kOhm plus or minus 2 percent
Dc Input Resistance Single Ended	50 kOhm plus or minus 2 percent
Input Capacitance Class	0.32 pF differential class
Input Voltage 5 To 1	2.5 Vpp or plus or minus 1.25 V
Input Voltage 10 To 1	5.0 Vpp or plus or minus 2.50 V
Noise Diff 5 To 1	33.5 nV per sqrt Hz
Noise Diff 10 To 1	53.9 nV per sqrt Hz
Noise Se 5 To 1	27.8 nV per sqrt Hz
Noise Se 10 To 1	47.7 nV per sqrt Hz
Noise Cm 5 To 1	21.8 nV per sqrt Hz
Noise Cm 10 To 1	38.4 nV per sqrt Hz
Head Compatibility	InfiniiMax III/III+ probe heads
Offset Range Class	plus or minus 16 V class
Literature	Keysight 5990-5653EN and probes selection guide
Recommended Oscilloscope Class	Infiniium models supporting AutoProbe InfiniiMax III+
Notes	
Bandwidth from Keysight N2833A InfiniiMax III+ listing. Attenuation, input voltage, and noise-density rows	

from Keysight InfiniiMax III/III+ data sheet 5990-5653EN III+ tables. Confirm exact AutoProbe generation on the target scope.

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.