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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N7003A InfiniiMax III+ Probe Amplifier

Agilent Keysight N7003A InfiniiMax III+ Probe Amplifier 20 GHz The Keysight N7003A is an InfiniiMax III+ probe amplifier with built-in InfiniiMode so differential, single-ended, and common-mode measurements can be made without changing probe-tip connections. OEM InfiniiMax III/III+ data sheet 5990-5653EN rates the amplifier at 20 GHz and pairs it with AutoProbe II Infiniium oscilloscopes and the InfiniiMax III/III+ probe-head family. High-speed differential bus probing, single-ended and common-mode debug on the same solder-in or browser connection, and Infiniium 90000 X/V/Q/Z or UXR capture. The Keysight N7003A is an InfiniiMax III+ probe amplifier with built-in InfiniiMode so differential, single-ended, and common-mode measurements can be made without changing probe-tip connections. OEM InfiniiMax III/III+ data sheet 5990-5653EN rates the amplifier at 20 GHz and pairs it with AutoProbe II Infiniium oscilloscopes and the InfiniiMax III/III+ probe-head family. High-speed differential bus probing, single-ended and common-mode debug on the same solder-in or browser connection, and Infiniium 90000 X/V/Q/Z or UXR capture.



MODEL

**Agilent / Keysight
N7003A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N7003A

LISTING

<https://aumictechlabs.com/products/n7003a-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight N7003A power rail probe is engineered for precision power integrity measurements in electronic designs. Its high sensitivity and low noise floor enable the capture of minute voltage variations, crucial for identifying potential power-related issues. The probe's wide bandwidth ensures accurate measurement of transient events and ripple on power rails, providing a comprehensive view of power system performance. It is an essential tool for engineers validating and optimizing power distribution networks.

N7003A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	InfiniiMax III+ probe amplifier
Series Family	Keysight N7000/1/2/3A InfiniiMax III+
Scope Interface	AutoProbe II (3.5 mm)
InfiniiMode Differential	A minusBInfiniiMode 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 (all InfiniiMode states)
Head Compatibility	InfiniiMax III/III+ probe heads (not InfiniiMaxI or II heads)
Infiniium Firmware	5.50 or higher on 90000 X/Q/V/Z; 10.00 or higher on UXR 13-33 GHz
Uxr 40 GHz Adapter	N2852A AutoProbe II to AutoProbe III on UXR 40 GHz or higher
Sampling Scope Adapter	N5477A for 86100D DCA-X
Literature	Keysight InfiniiMax III/III+ probing system data sheet 5990-5653EN
Noise Diff 5 To	33.5 nV per sqrt Hz (III+ InfiniiMode differential 5:1)
Noise Diff 10 To	53.9 nV per sqrt Hz (III+ differential 10:1)
Noise Se 5 To	27.8 nV per sqrt Hz (III+ single-endedA or B 5:1)
Noise Se 10 To	47.7 nV per sqrt Hz (III+ single-ended 10:1)
Noise Cm 5 To	21.8 nV per sqrt Hz (III+ common mode 5:1)
Noise Cm 10 To	38.4 nV per sqrt Hz (III+ common-mode 10:1)
Input Voltage 5 To	2.5 Vpp or plus or minus 1.25 V at 5:1 attenuation
Input Voltage 10 To	5.0 Vpp or plus or minus 2.50 V at 10:1 attenuation
Amplifier Bandwidth	20 GHz
Recommended Oscilloscope Class	Infiniium 90000 X/V/Q/Z-Series 20 GHz models
Zif Head Capacitance Diff	32 fF typical (N5439A class)
Zif Head Capacitance Se	44 fF typical
Browser Head Capacitance Diff	35 fF typical (N5445A)

PARAMETER	VALUE
Browser Head Capacitance Se	50 fF typical
Browser Pitch	20 mil to 125 mil variable
Solder In Extreme Temp Capacitance Diff	108 fF typical
Solder In Extreme Temp Capacitance Se	140 fF typical
Bandwidth	20 GHz
Attenuation	5:1 or 10:1 automatically selected from volts/division (all InfiniiMode states)

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	
Technical Specifications	
PARAMETER	VALUE
Instrument Type	InfiniiMax III+ probe amplifier
Series Family	Keysight N7000/1/2/3A InfiniiMax III+
Scope Interface	AutoProbe II (3.5 mm)
InfiniiMode Differential	A minus B
InfiniiMode 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 (all InfiniiMode states)
Head Compatibility	InfiniiMax III/III+ probe heads (not InfiniiMax I or II heads)
Infiniium Firmware	5.50 or higher on 90000 X/Q/V/Z; 10.00 or higher on UXR 13-33 GHz
Uxr 40 GHz Adapter	N2852A AutoProbe II to AutoProbe III on UXR 40 GHz or higher
Sampling Scope Adapter	N5477A for 86100D DCA-X
Literature	Keysight InfiniiMax III/III+ probing system data sheet 5990-5653EN
Noise Diff 5 To 1	33.5 nV per sqrt Hz (III+ InfiniiMode differential 5:1)
Noise Diff 10 To 1	53.9 nV per sqrt Hz (III+ differential 10:1)
Noise Se 5 To 1	27.8 nV per sqrt Hz (III+ single-ended A or B 5:1)
Noise Se 10 To 1	47.7 nV per sqrt Hz (III+ single-ended 10:1)
Noise Cm 5 To 1	21.8 nV per sqrt Hz (III+ common mode 5:1)
Noise Cm 10 To 1	38.4 nV per sqrt Hz (III+ common-mode 10:1)
Input Voltage 5 To 1	2.5 Vpp or plus or minus 1.25 V at 5:1 attenuation
Input Voltage 10 To 1	5.0 Vpp or plus or minus 2.50 V at 10:1 attenuation
Amplifier Bandwidth	20 GHz
Recommended Oscilloscope Class	Infiniium 90000 X/V/Q/Z-Series 20 GHz models
Zif Head Capacitance Diff	32 fF typical (N5439A class)
Zif Head Capacitance Se	44 fF typical

PARAMETER	VALUE
Browser Head Capacitance Diff	35 fF typical (N5445A)
Browser Head Capacitance Se	50 fF typical
Browser Pitch	20 mil to 125 mil variable
Solder In Extreme Temp Capacitance Diff	108 fF typical
Solder In Extreme Temp Capacitance Se	140 fF typical

Specifications

PARAMETER	VALUE
Instrument Type	InfiniiMax III+ probe amplifier
Series Family	Keysight N7000/1/2/3A InfiniiMax III+
Scope Interface	AutoProbe II (3.5 mm)
InfiniiMode Differential	A minusBInfiniiMode 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 (all InfiniiMode states)
Head Compatibility	InfiniiMax III/III+ probe heads (not InfiniiMaxIor II heads)
Infiniium Firmware	5.50 or higher on 90000 X/Q/V/Z; 10.00 or higher on UXR 13-33 GHz
Uxr 40 GHz Adapter	N2852A AutoProbe II to AutoProbe III on UXR 40 GHz or higher
Sampling Scope Adapter	N5477A for 86100D DCA-X
Literature	Keysight InfiniiMax III/III+ probing system data sheet 5990-5653EN
Noise Diff 5 To 1	33.5 nV per sqrt Hz (III+ InfiniiMode differential 5:1)
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Noise Se 5 To 1	27.8 nV per sqrt Hz (III+ single-endedAor B 5:1)
Noise Se 10 To 1	47.7 nV per sqrt Hz (III+ single-ended 10:1)
Noise Cm 5 To 1	21.8 nV per sqrt Hz (III+ common mode 5:1)
Noise Cm 10 To 1	38.4 nV per sqrt Hz (III+ common-mode 10:1)
Input Voltage 5 To 1	2.5 Vpp or plus or minus 1.25 V at 5:1 attenuation
Input Voltage 10 To 1	5.0 Vpp or plus or minus 2.50 V at 10:1 attenuation
Amplifier Bandwidth	20 GHz
Recommended Oscilloscope Class	Infiniium 90000 X/V/Q/Z-Series 20 GHz models
Zif Head Capacitance Diff	32 fF typical (N5439A class)
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PARAMETER	VALUE
Browser Head Capacitance Diff	35 fF typical (N5445A)
Browser Head Capacitance Se	50 fF typical
Browser Pitch	20 mil to 125 mil variable
Solder In Extreme Temp Capacitance Diff	108 fF typical
Solder In Extreme Temp Capacitance Se	140 fF typical

Notes
Bandwidth, InfiniiMode, AutoProbe II, attenuation, and noise-density rows from Keysight InfiniiMax III/III+ probing system data sheet 5990-5653EN model N7003A and the N2830/N7000 InfiniiMax III+ user's guide. Head capacitance rows are the III+ head table in that user's guide.

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.