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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N2791A

HP Agilent Keysight N2791A High Voltage Differential Probe 25 MHz The Keysight N2791A is a 25 MHz high-voltage differential probe for floating measurements on earth-grounded oscilloscopes. OEM data sheet 5990-3780EN rates selectable 10:1 and 100:1 attenuation with up to plus or minus 700 V differential and common-mode operating voltage and USB or 4x AA battery power. Power electronics floating measurements, motor control, and power supply debug on 1 MOhm BNC oscilloscopes. Compatible with any 1 MOhm BNC scope input The Keysight N2791A is a 25 MHz high-voltage differential probe for floating measurements on earth-grounded oscilloscopes. OEM data sheet 5990-3780EN rates selectable 10:1 and 100:1 attenuation with up to plus or minus 700 V differential and common-mode operating voltage and USB or 4x AA battery power. Power electronics floating measurements, motor control, and power supply debug on 1 MOhm BNC oscilloscopes. Compatible with any 1 MOhm BNC scope input Extreme temperature accessory kit N7013A available



MODEL

**Agilent / Keysight
N2791A**

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

N2791A

LISTING

<https://aumictechlabs.com/products/n2791a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N2791A is a 25 MHz differential probe engineered for floating signal measurements on earth-grounded oscilloscopes. It enables safe, accurate acquisition of differential and common mode signals up to ± 700 V, making it ideal for power electronics characterization and circuit analysis where conventional single-ended probes are inadequate. This probe features user-selectable 10:1 or 100:1 attenuation, allowing flexible dynamic range optimization across measurement scenarios. At 100:1

attenuation, maximum differential operating voltage reaches ± 700 V; at 10:1, ± 70 V. Common mode voltage is rated to ± 700 V across both settings. The 1000 Vrms CAT II working voltage rating between input leads and earth ensures safe operation in industrial and lab environments.

Technical Specifications
Bandwidth: 25 MHz Attenuation: User-selectable 10:1 or 100:1 Maximum Differential Voltage: ± 700 V (100:1), ± 70 V (10:1) Maximum Common Mode Voltage: ± 700 V Input Impedance: 8 M Ω Input Capacitance: 8 pF Rise Time: ≤ 14 ns Common Mode Rejection Ratio: > 50 dB at 1 MHz CAT Rating: II, 1000 Vrms maximum working voltage

Key Features Battery-powered operation (4 $\times$ AA cells included) with optional USB power via supplied 2 m cable LED power status indicator and over-range alert for dynamic range monitoring 70 cm BNC output cable compatible with any 1 M Ω oscilloscope input 45 cm input lead length with safety hooks and alligator clips Compact form factor: 170 mm $\times$ 63 mm, 400 g Operating temperature range: -10 to 40 $^{\circ}\text{C}$

Typical Applications Power supply characterization, motor drive analysis, switching circuit evaluation, isolated signal measurement in multi-channel systems, and DC-link voltage monitoring in power conversion topologies.

Compatibility & Integration Connects directly to any oscilloscope with 1 M Ω BNC input, including Keysight InfiniiVision 30 series. AutoProbe interface compatible on scope models supporting this standard.

N2791A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	High-voltage differential probe
Bandwidth	greater than or equal to 25 MHz (-3 dB, driving 1 MOhm oscilloscope input)
Rise Time Calculated	less than or equal to 14 ns
Attenuation Ratios	10:1 and 100:1 switchable
Gain Accuracy	plus or minus 2 percent of reading at 20 to 30 C; plus or minus 4 percent at 0 to 20 C and 30 to 50 C
Max Differential Operating Voltage 100 To	plus or minus 700 V
Max Differential Operating Voltage 10 To	plus or minus 70 V
Max Common Mode Operating Voltage	plus or minus 700 V at 100:1 and at 10:1
Absolute Max Rated Input Each Side To Ground	plus or minus 1000 Vrms CAT II differential and common mode (per OEM table)
InputREach Side To Ground	4 MOhm // 10 pF
InputRBetween Inputs	8 MOhm // 8 pF
Output Voltage Swing	7 V into 1 MOhm (100:1)
Scope Input Impedance Required	1 MOhm
Output Offset Typical	plus or minus 7.5 mV adjustable
Cmrr Typical	-80 dB at 60 Hz, -40 dB at 1 MHz
Power Requirements	4 AA batteries or USB power adapter (5 V/200 mA, 9 V/120 mA)
Battery Life Alkaline	15 hours
Probe Body Dimensions	170 mm x 63 mm x 21 mm
Cable Length Class	per OEM user guide accessory set
Series Family	Keysight high-voltage differential probes
Literature	Keysight 5990-3780EN
Probe Tip Accessory Kit	N2791-68700 alligator clips and hook clips
Rise Time	Calculated: less than or equal to 14 ns
Attenuation	Ratios: 10:1 and 100:1 switchable

N2791A Specifications

PARAMETER	VALUE
Applications	Power electronics floating measurements, motor control, and power supply debug on 1 MOhm BNC oscilloscopes.
Key Features	Switchable 10:1 and 100:1 attenuation
USB or 4x AA battery power	Compatible with any 1 MOhm BNC scope input
Extreme temperature accessory kit N7013A available	Alligator and hook clip accessory kit N2791-68700
Technical Specifications	Instrument Type: High-voltage differential probe

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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Max Differential Operating Voltage 100 To 1	plus or minus 700 V
Max Differential Operating Voltage 10 To 1	plus or minus 70 V
Max Common Mode Operating Voltage	plus or minus 700 V at 100:1 and at 10:1
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PARAMETER	VALUE
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Probe Tip Accessory Kit	N2791-68700 alligator clips and hook clips
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Notes

From Keysight N2790A/N2791A/N2891A data sheet 5990-3780EN and N2791A/N2891A High-Voltage Differential Probes User Guide. Confirm CAT ratings and limits on the probe label.

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.