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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N2782B

HP Agilent Keysight N2782B AC/DC Current Probe 50 MHz 30 Arms The Keysight N2782B is an AC/DC current probe using hybrid Hall-effect and AC current transformer technology for clip-on measurements without breaking the circuit. OEM N2780B Series data sheet 5989-6432EN rates bandwidth DC to 50 MHz and continuous current 30 Arms with high SNR for milliampere-range measurements and external N2779A power supply. Switching power supply and inverter current, low-level milliampere current debug, motor drives, disk drives, LCD ballasts, and amplifiers on 1 MOhm BNC oscilloscopes. The Keysight N2782B is an AC/DC current probe using hybrid Hall-effect and AC current transformer technology for clip-on measurements without breaking the circuit. OEM N2780B Series data sheet 5989-6432EN rates bandwidth DC to 50 MHz and continuous current 30 Arms with high SNR for milliampere-range measurements and external N2779A power supply. Switching power supply and inverter current, low-level milliampere current debug, motor drives, disk drives, LCD ballasts, and amplifiers on 1 MOhm BNC oscilloscopes.

**MODEL****Agilent / Keysight
N2782B****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****N2782B****LISTING**<https://aumictechlabs.com/products/n2782b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight N2782B is a 50 MHz AC/DC current probe that delivers non-invasive, accurate current measurements from DC to 50 MHz using hybrid Hall-effect and AC current transformer technology. It measures continuous RMS currents up to 30 Arms with pulse capability

to 50 A, while maintaining $\pm 1.0\%$ amplitude accuracy and low insertion impedance. The probe connects directly to oscilloscope 1 M Ω inputs via a 1.5 m BNC cable and includes a demagnetize function for core de-magnetization and zero adjustment for offset correction.

Technical Specifications

Measurement Range: DC to 50 MHz bandwidth; 5 mA minimum measurable current
Current Capacity: 30 Arms continuous; 50 A maximum pulse current
Amplitude Accuracy: $\pm 1.0\%$ of reading ± 10 mA
Rise Time: 7 ns or less
Output Sensitivity: 0.1 V/A (10:1 attenuation)
Output Impedance: 1 M Ω when terminated into 1 M Ω oscilloscope input
Safety Rating: 300 V CAT I, 300 V CAT III
Maximum Conductor Diameter: 5 mm
Cable Length: 1.5 m probe to BNC

Key Features

Hybrid technology combining Hall-effect sensor with AC current transformer for DC and AC measurement
High signal-to-noise ratio for low-level milliampere measurements
Demagnetize function removes residual core magnetism
Zero adjustment control corrects voltage offset and temperature drift
Split-core design enables non-invasive clip-on/clip-off connection
Overload protection safeguards probe integrity
Compact dimensions: 22.9 cm $\times$ 9.7 cm $\times$ 2.5 cm; 0.23 kg weight

Typical Applications

Motor drives, switching power supplies, inverters, controllers, disk drives, LCD displays, electronic ballasts, and amplifiers driving inductive loads. Ideal for steady-state and transient current analysis in power electronics.

Compatibility & Integration

Direct connection to Keysight 1000, 3000, InfiniiVision 2000X/3000X/4000X/5000/6000/7000 Series, and Infiniium 8000/9000 Series oscilloscopes. For Infiniium 90000A Series, requires E2697A adapter; for 90000 X-Series, requires N5449A adapter. If oscilloscope input is limited to 50 Ω , use E2697A adapter for 50 Ω to 1 M Ω conversion. Requires Keysight N2779A external power supply; one supply powers up to three N278xB probes.

N2782B Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	AC/DC current probe
Bandwidth	DC to 50 MHz (-3 dB)
Rise Time	7 ns or less
Maximum Continuous Current Rms	30 A
Maximum Peak Current Non Continuous	50 A peak
Lowest Measurable Current	5 mA (at plus or minus 3 percent accuracy at DC, scope 1 mV/div high-resolution mode)
Amplitude Accuracy	plus or minus 1.0 percent of reading plus or minus 10 mA (DC and 45 to 66 Hz, rated current)
Temperature Coefficient Sensitivity	plus or minus 2 percent or less
Output Sensitivity	0.1 V/A (10:1)
Noise	2.5 mArms or less (with 20 MHz band measuring instrument)
Rated Supply Voltage	DC plus or minus 12 V plus or minus 0.5 V
Power Supply Accessory	N2779A three channel supply
Scope Interface	Direct BNC to 1 MOhm oscilloscope input
Compatible Scope Impedance	1 MOhm BNC required
Adapter HighZInfinium 80000 900	E2697A
Adapter High Z 90000 X	N5449A
Operating Temperature	0 C to 40 C
Operating Humidity	80 percent RH or less (no condensation)
Series Family	Keysight N2780B Series
Literature	Keysight 5989-6432EN
Demagnetize Function	Built-in DEMAG
Zero Adjustment	Offset and temperature drift correction control
Humidity	80 percent RH or less (no condensation)

General Specifications & Supplementary Characteristics

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Series Family	Keysight N2780B Series
Literature	Keysight 5989-6432EN
Demagnetize Function	Built-in DEMAG
Zero Adjustment	Offset and temperature drift correction control Notes From Keysight N2780B Series data sheet 5989-6432EN model column N2782B and N2780/1/2/3B Current Probes User Guide. Confirm unit-specific calibration limits on certificate.

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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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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.