Keysight N2780B Series
AC/DC Current Probes
A wide selection of current probes
to meet your application’s needs

Data Sheet
Hybrid technology for AC and DC measurements

Using hybrid technology that includes a Hall-effect sensor and an AC current transformer, the probes provide accurate measurement of DC or AC currents up to 500 Arms (for model N2780B) or DC–100 MHz (for model N2783B), without breaking into the circuit. Using split core construction, the probe easily clips on and off of a conductor.

Wide range of applications

The current probes feature broad measurement ranges (up to 500 A), flat frequency response, low noise and low insertion loss that make the probes ideal for current measurements in areas such as measuring steady state or transient current of motor drives, switching power supplies, inverters, controllers, sensors, disk drives, LCD displays, electronic ballasts and amplifiers. The high signal-to-noise ratio of the N2782B and N2783B makes them ideal for making low-level current measurements in milliampere ranges.

Accurate current measurement

A built-in DEMAG (demagnetize) function allows the removal of any residual magnetism that has built up in the magnetic core due to power on/off switching or excessive input current. In addition, voltage offset or temperature drift on the probe can be easily corrected by using the zero adjustment control.

Compatible with any oscilloscope with a high-impedance BNC input, the new N2780B Series current probes offer accurate and reliable solution for measuring DC and AC currents.
N2797A 3-channel power supply specifications

Applicable current probes: N2780B, N2781B, N2782B, N2783B and N2774A
Number of power supply connectors: 3
Connector type: LEMO inc./FFA..0S.304.CNAC42Z
Output voltage: DC (12 V, 2.5 A)
Maximum rated power: 170 VA
Input power requirement: AC 100-240 VAC, 50/60 Hz, 125-170 VAC

Note: For the characteristic plots of other current probe models, refer to the N2780B Series current probe user's manual.
Compatible Oscilloscopes

Any oscilloscope offering 1 MΩ BNC input including Keysight Technologies, Inc. 1000, 3000 InfiniVision 2000X, 3000X, 5000, 6000 and 7000 Series, and Infinium 8000 and 9000 Series. You must select the input impedance of the oscilloscope to be 1 MΩ in order to make accurate measurements. If the oscilloscope you are using has a 50Ω input impedance setting only, you can purchase the Keysight E2697A 50Ω to 1 MΩ adapter for use with the Infinium 80000 or 90000 Series or the N5449A high impedance probe adapter for use with the Infinium 90000 X-Series.

Ordering Information

N2780B
2 MHz/500A AC/DC current probe
N2781B
10 MHz/150A AC/DC current probe
N2782B
50 MHz/30A AC/DC current probe
N2783B
100 MHz/30A AC/DC current probe
N2779A
3-channel power supply for N2780B Series current probes
Evolving Since 1939

Our unique combination of hardware, software, services, and people can help you reach your next breakthrough. We are unlocking the future of technology. From Hewlett-Packard to Agilent to Keysight.

myKeysight

www.keysight.com/find/mykeysight
A personalized view into the information most relevant to you.

http://www.keysight.com/find/emt_product_registration
Register your products to get up-to-date product information and find warranty information.

Keysight Services

www.keysight.com/find/service
Keysight Services can help from acquisition to renewal across your instrument's lifecycle. Our comprehensive service offerings—one-stop calibration, repair, asset management, technology refresh, consulting, training and more—helps you improve product quality and lower costs.

Keysight Assurance Plans

www.keysight.com/find/AssurancePlans
Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

Keysight Channel Partners

www.keysight.com/find/channelpartners
Get the best of both worlds: Keysight’s measurement expertise and product breadth, combined with channel partner convenience.

www.keysight.com/find/probes