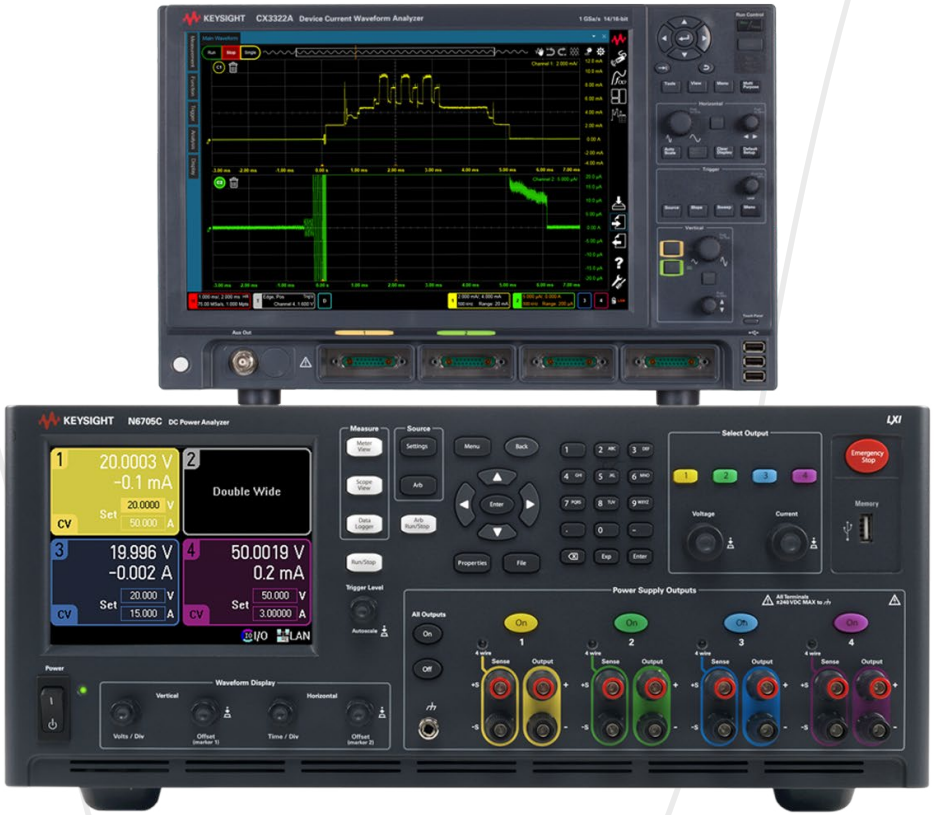
Power Analyzers

CATALOG



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Keysight Power Analyzers

One family. 2 classes.

DEVICE CURRENT ANALYZER

CX3-class

- 0 to 8 Digital channels
- 2 to 4 Analog channels

DC POWER ANALYZER

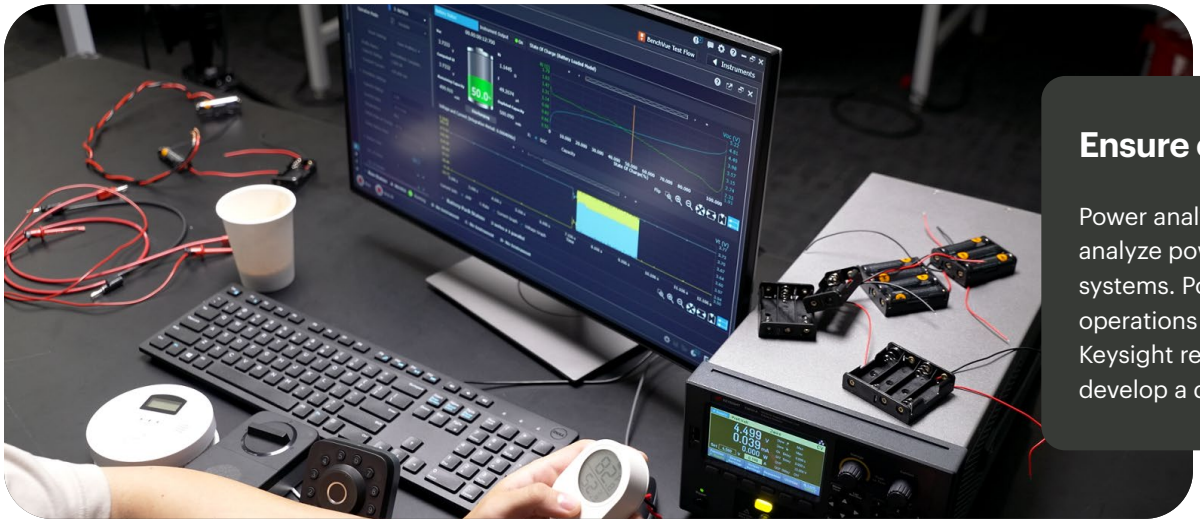
NP2-class

- 600 W to 1200 W Maximum power
- 4 Channels

Introduction

Keysight Power Analyzers — from design validation to system optimization

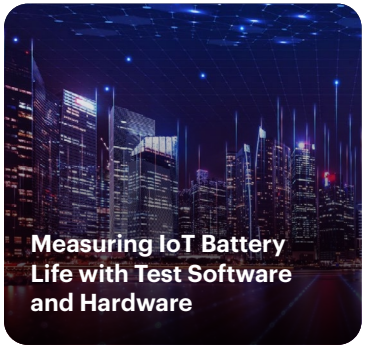
Keysight power analyzers are now offered in two capability classes across device current analyzer and DC power analyzer units. They measure power, energy consumption, efficiency, and quality across a wide range of devices. Device current analyzers include the CX3-class, ideal for evaluating or troubleshooting semiconductors or power delivery networks. DC power analyzers include the NP2-class, designed for applications when multiple power channels and measurements need to be made simultaneously. Understanding which analyzer capabilities suit your application needs can help you choose the best solution for design, debug, compliance, or optimization.

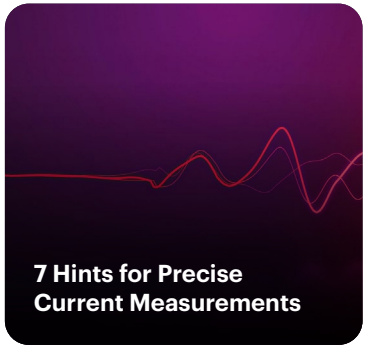


Ensure electrical performance and reliability

Power analyzers are specialized instruments used to measure and analyze power efficiency, consumption, and quality in electrical systems. Power analyzers can capture rare anomalies during operations by analyzing massive amounts of waveform data. Keysight resources cover a wide range of applications so you can develop a deeper understanding of power analyzers.

Here are a few examples of the resources you will find to help you select the power analyzer that is right for you:





Device Current Analyzers

High-precision dynamic current and voltage measurements

Keysight CX3-class device current analyzers include the CX3300A Series. They provide high-precision measurements of dynamic current and voltage waveforms and transient behavior. Our device current analyzers offer 14- and 16-bit ADC resolution to accurately measure ultra-low currents, making them ideal for power delivery network characterization in power-sensitive applications such as IoT, medical, automotive, and mobile devices. Deep memory enables repetitive voltage and current waveform capture, and high-resolution analysis over extended durations. Choose one of our popular configurations or configure one specific to your application.

Fast sampling rate

Maximum 1 GSa/s enables precision measurement of fast waveforms with wide dynamic range, beyond a conventional oscilloscope.

Agile machine learning

Waveform analytics with accelerated machine learning detects anomalies faster, with deep insights into complex power system behavior.

Deep memory

Capture continuous, detailed waveform data with up to 256 Mpts memory, ideal for calculating power metrics like average, root mean square, and peak over time.

Low-level current testing

Precise low-level dynamic current measurement with 14- or 16-bit ADC resolution and powerful waveform analytics features ensure product performance.

Class	Included Brands	Range of Performance Specifications				
		Digital Channels	Analog Channels	ADC Resolution Options	Maximum Sample Rate	Maximum Memory
CX3	CX3300A Series	0 to 8	2 to 4	14 or 16 bits	1 GSa/s	256 Mpts/ch

DC Power Analyzers

Sourcing and measurement functions in one instrument

Keysight NP2-class DC power analyzers include the N6705C and N6715C. They are highly integrated instruments that provide valuable power insights in minutes by combining up to four high-level DC power supplies or electronic loads plus a digital multimeter (DMM), oscilloscope, arbitrary waveform generator (AWG), and data logger into a single instrument. Perform sourcing and measurement functions right from the front panel with a large, easy-to-use interface. Our DC power analyzers are ideal for evaluating battery performance and lifespan, testing LED lighting efficiency, characterizing the output of DC power supplies for stability and ripple, optimizing DC-DC converter designs, and even ensuring the reliability and performance of DC power systems in critical aerospace and defense systems. Choose one of our popular configurations or configure one specific to your application.

5-instruments-in-1

Integrates a DC power supply or electronic load, plus a DMM, oscilloscope, AWG, and data logger in one instrument for streamlined electrical testing and monitoring.

Remote sensing capability

Four-wire sensing on each output ensures accurate measurements by compensating for voltage drops in power leads during high current draw from your device under test.

Output sequencing

Each DC power or load module can be individually set to turn on or off with a delay to test ICs or boards with multiple power rails.

Large color display

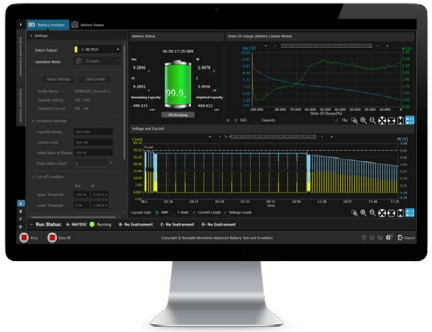
Real-time visualization of test results during execution enables efficient monitoring for DUT analysis, debugging, and ATE test development workflows.

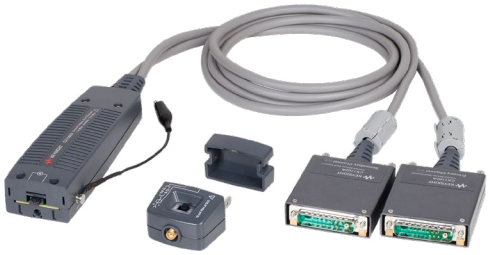
Class	Included Brands	Range of Performance Specifications				
		Maximum Power	Number of Outputs	ADC Resolution	Noise and Ripple	Accuracy
NP2	N6705C and N6715C	600 W to 1200 W	4	18 bits	0.99 mVpp	0.025% +1.8 mV

Software and Accessories

Find compatible software and accessories for your power analyzer

Explore the wide variety of current and power control and analysis software on our power analyzers. Keysight power analyzers offer software and accessories tailored for waveform analysis, battery test and emulation, power control and analysis, and lab automation. Pair your power analyzer with the sensors, adapters, and rack-mount kits needed to optimize your lab environment for your application.





Enhance the capability of your power analyzer with a wide range of specialty software:

- current waveform analytics
- battery test and emulation
- power supply
- lab management and control
- power control and analysis
- current analyzer control and automation

Get more functionality out of your power analyzer by pairing it with the right accessories, including:

- differential sensors
- shunt current sensors
- digital triggers
- passive probe adapters
- rack-mount kits

Keysight Support Services

Explore the services that are right for you

Keysight Support Services can reduce your learning curve, enhance your uptime, guarantee the accuracy of your testing equipment, and provide the expertise you require, precisely when and where you need it.

Maximize your instrument uptime, quickly optimize your test measurements, and get the answers you need at our fastest available times. KeysightCare curated support plans bundle critical services with prioritized response and turnaround times. **High-performance instruments include one year of KeysightCare Assured.**

Calibration

Ensure your test system performs to specification and meets local and global standards.

Repair

Restore equipment to original functionality and specifications with trained technicians.

KeysightCare

Innovate at speed with curated support plans and prioritized response and turnaround times.

Education

Make measurements quickly with eLearning and in-house, instructor-led training.

Keysight Support

Get 24x7 access to service requests, case management help, and technical articles.

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