# Basic Instruments

## KeysightCare: Access to Expertise 24/7

August - October 2022

**KEYSIGHT**

CATALOG

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**KEYSIGHT**CARE

# KeysightCare: Access to Expertise 24/7

According to a survey by Dimensional Research, 62% of technical companies polled reported that incorrect setup of test instruments impacts their business results. Furthermore, 89% of the companies said they would be more efficient with faster access to test experts and knowledge resources. Of these test professionals, 95% seek technical support every month.

The findings from Dimensional Research underscore the importance of access to expertise. KeysightCare Technical Support provides that access.

Your newly purchased basic instruments include three years of KeysightCare Technical Support and a three-year warranty. The KeysightCare knowledge center and our technical experts are available to provide in-depth knowledge on leading-edge technologies, industry standards, compliance, applications, and the instruments and software used in your test systems.

## Access technical expertise

- Unlimited access to experts with a committed response time in ≤ two business days.
- Online knowledge center available 24/7.
- Easy and direct access to the Keysight support portal for case management tracking.
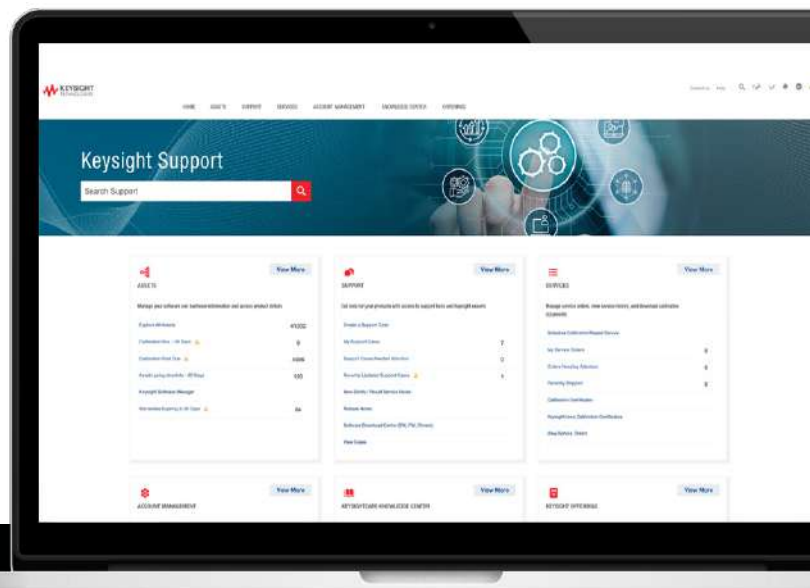
## Operate on your schedule

- Access the Keysight support portal for personalized, real-time access to all your support needs.
- Find technical articles, application notes, or FAQs, or talk with support engineers.
- Create new support cases and view real-time asset repair status.

## Save time

- Faster, predictable access to technical experts.
- Faster resolution of technical support issues.
- Prevention of potential support issues.

**> LOG INTO THE KEYSIGHT SUPPORT PORTAL**
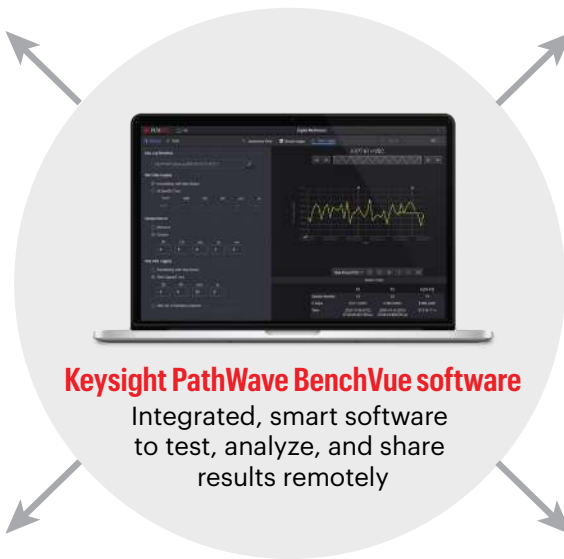
# Smart Bench Essentials

## 4 instruments; 1 connected interface

### EDU36311A DC power supply
90 W, triple output, and
programmable for
clean, reliable power

### EDUX1052G oscilloscope
50 MHz, 2 analog channels,
and 1 GSa/s sample rate for
accurate capture and analysis

**Keysight PathWave BenchVue software**
Integrated, smart software
to test, analyze, and share
results remotely

### EDU34450A 5.5-digit multimeter
Measures 11 input signals at
up to 110 readings/s
for speed-critical tests

### EDU33211A/EDU33212A function generators
17 arbitrary waveforms and
6 built-in modulations to get you
set up and testing quickly

PATHWAVE
**BenchVue instrument application**
- instrument set up and test
- data logging and screen capture
- data export to several file types

PATHWAVE
**PW9111EDU lab manager**
- lab configuration
- asset tracking
- mass firmware update

PATHWAVE
**PW9112EDU remote learning**
- lab scheduling and resource booking
- remote access and authentication
- browser-based lab work

**KeysightCare 24/7 Technical Support**

# X-Series Signal Generators

The Keysight X-Series creates signals capable of testing your very best devices. From the pure and precise MXG to the cost-effective EXG and general-purpose CXG, the X-Series helps you generate true performance.

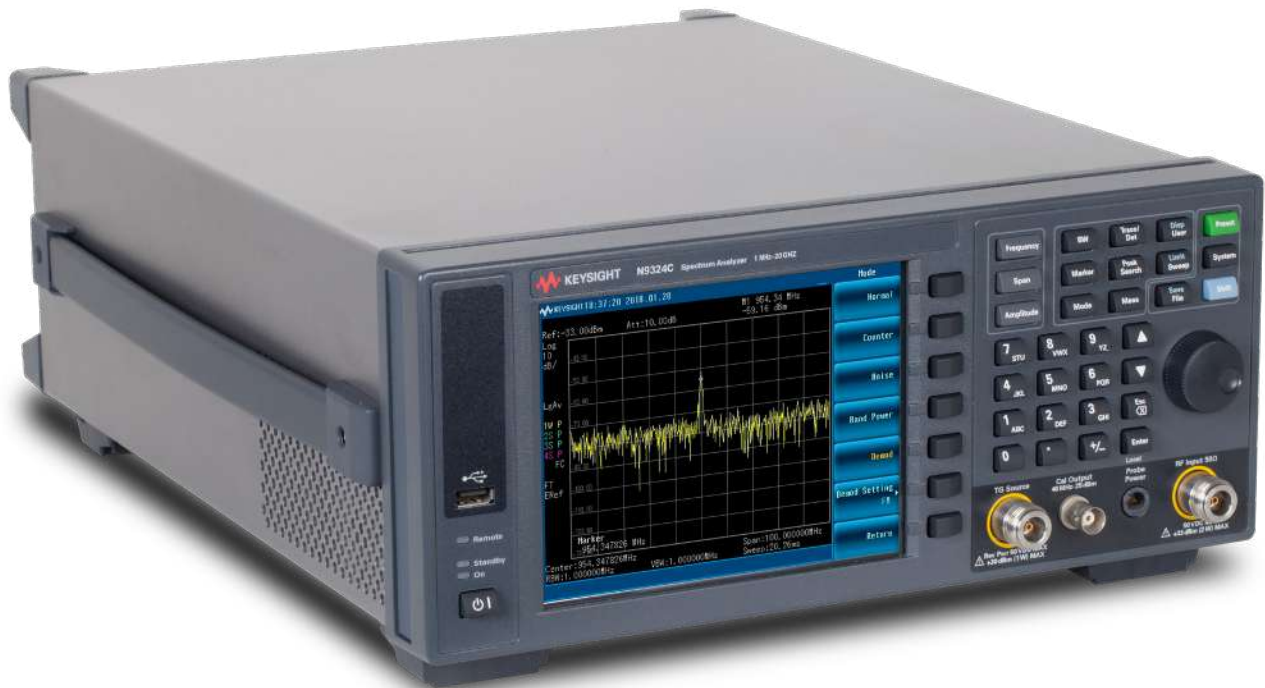| | MXG-Analog | EXG-Analog | CXG-Analog |
|---|---|---|---|
| Model number | N5181B | N5171B | N5166B |
| Frequency range | 9 kHz to 6 GHz | 9 kHz to 6 GHz | 9 kHz to 6 GHz |
| Maximum output power | +24 dBm | +21 dBm | +18 dBm |
| Frequency switching (list mode) | 800 µs | 800 µs | 5 ms |
| Level accuracy | ±0.6 dB | ±0.6 dB | ±0.6 dB |
| SSB phase noise (1 GHz, 20 kHz offset) | -146 dBc/Hz | -122 dBc/Hz | -119 dBc/Hz |
| Harmonics (at 1 GHz) | -35 dBc | -35 dBc | -35 dBc |
| Analog modulation | AM, FM, PM, and pulse modulation | AM, FM, PM, and pulse modulation | AM, FM, PM, and pulse modulation |
| Digital modulation | N/A | N/A | 120 MHz bandwidth |
| | DATA SHEET | DATA SHEET | DATA SHEET |
| | Get a Quote > | Get a Quote > | Get a Quote > |

# Basic Spectrum Analyzers (BSAs)*

The BSAs define value-priced general-purpose instruments up to 20 GHz. You can rely on the BSA for proven testing efficiency, usability, and the flexibility to adapt to new requirements.

| Model | N9320B | N9321C | N9322C | N9323C | N9324C |
|---|---|---|---|---|---|
| Frequency | 9 kHz to 3 GHz | 9 kHz to 4 GHz | 9 kHz to 7 GHz | 1 MHz to 13.6 GHz | 1 MHz to 20 GHz |
| Overall amplitude accuracy | ±0.5 dB | ±0.6 dB | ±0.6 dB | ±0.7 dB | ±0.7 dB |
| DANL at 1 GHz | -145 dBm | -152 dBm | -152 dBm | -144 dBm | -144 dBm |
| Maximum analysis bandwidth | 1 MHz | 1 MHz | 1 MHz | 1 MHz | 1 MHz |
| Phase Noise at 1 GHz | -90 dBc / Hz | -90 dBc / Hz | -90 dBc / Hz | -92 dBc / Hz | -92 dBc / Hz |
| | DATA SHEET | DATA SHEET | DATA SHEET | DATA SHEET | DATA SHEET |
| | Get a Quote > | Get a Quote > | Get a Quote > | Get a Quote > | Get a Quote > |

* From selected distributors only

# InfiniiVision Oscilloscopes

- Experience up to 1,000,000 waveforms / second update rate.
- Get MegaZoom IV and measure with uncompromised, responsive smart memory.
- Test using multiple instrument functionality.
- Expand your platform with upgradable bandwidth, a mixed-signal oscilloscope (MSO), serial analysis, and a built-in waveform function generator.



## Get more functionality with available software packages

|         | Automobile       | Aerospace & Defense | Embedded   | Power      | USB         | Ultimate Bundle |
|---------|------------------|---------------------|------------|------------|-------------|-----------------|
| 1000X   | Standard (DSOX)  | NA                  | Standard   | NA         | NA          | NA              |
| 2000X   | D2000AUTB        | NA                  | D2000GENB  | NA         | NA          | D2000BDLB       |
| 3000X   | D3000AUTB        | D3000AERB           | D3000GENB  | D3000PWRB  | D3000USBB   | D3000BDLB       |
| 4000X   | D4000AUTB        | D4000AERB           | D4000GENB  | D4000PWRB  | D4000USBB   | D4000BDLB       |
| 6000X   | D6000AUTB        | D6000AERB           | D6000GENB  | D6000PWRB  | D6000USBB   | D6000BDLB       |

| Model | 1000 X-Series | 2000 X-Series | 3000G X-Series | 4000 X-Series | 6000 X-Series | Infiniium EXR-Series |
|---|---|---|---|---|---|---|
| Description | Professional-level capabilities in an entry-level oscilloscope<br><br>• Protocol analysis<br>• Bode plots<br>• Fast Fourier transform (FFT) | Entry-level with more capabilities<br><br>• Serial bus options<br>• Mixed-signal oscilloscope options | Advanced capabilities simplified<br><br>• Advanced math<br>• Standard embedded software**<br>• Waveform and measurement histograms** | Everything the 3000G has plus see more of your signal<br><br>• Higher bandwidth<br>• Larger touch screen<br>• Up to four active probes | Dive deeper and analyze more signal detail<br><br>• Voice control<br>• Advanced jitter analysis, time interval error plots, histograms, and eye diagrams | Simplify data gathering and analysis<br><br>• 25% lower noise than S-Series<br>• New Fault Hunter feature<br>• Multiscope application |
| Bandwidth | 50 MHz to 200 MHz | 70 MHz to 200 MHz | 100 MHz to 1 GHz | 200 MHz to 1.5 GHz | 1 GHz to 6 GHz | 500 MHz to 2.5 GHz |
| Channels (analog + digital) | 2, 4 | 2, 2+8, 4, 4+8 | 2, 2+16, 4, 4+16 | | | 4, 4+16, 8, 8+16 |
| Sample rate | Up to 2 GSa/s | | Up to 5 GSa/s | | Up to 20 GSa/s | Up to 16 GSa/s |
| Memory depth | Up to 2 Mpts and segmented memory standard | Up to 1 Mpts and segmented memory standard | Up to 4 Mpts and segmented memory standard | | | Up to 3.2 Gpts |
| Waveform update rate | >200,000 wfms/s | >200,000 wfms/s | >1,000,000 wfms/s | | >450,000 wfms/s | >200,000 wfms/s |
| Display | 7-inch | 8.5-inch | 8.5-inch capacitive touch screen | 12.1-inch capacitive touch screen | 12.1-inch capacitive multi-touch screen | 15.6-inch capacitive touchscreen |
| Built-in instruments | 20-MHz function generator, 5-digit counter, frequency response analyzer* | 20-MHz function generator, 5-digit counter* | 20-MHz AWG, 8-digit counter, frequency response analyzer* | Dual 20-MHz AWG, 5-digit counter, and frequency response analyzer* | Dual 20-MHz AWG, 10-digit counter, and frequency response analyzer* | 10-digit counter, DVM, and protocol analyzers |
| | DATA SHEET | DATA SHEET | DATA SHEET | DATA SHEET | DATA SHEET | DATA SHEET |
| | Get a Quote > | Get a Quote > | Get a Quote > | Get a Quote > | Get a Quote > | Get a Quote > |

\* All X-Series models have a built-in protocol analyzer and 3-digit digital voltmeter (DVM)

\*\* Only standard on the 3000G X-Series models

**Featured Resource**

# 5 Mistakes People Make When Getting a Low-Cost Scope

Choosing the right oscilloscope is a difficult task, especially if you're on a budget. You want to make the best decision for your needs while saving money and maintaining quality.

Avoid five common mistakes people make when selecting a low-cost oscilloscope so you — and your wallet — are happy with your decision.

**❯ DOWNLOAD THE WHITE PAPER**

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# DAQ970A and DAQ973A Data Acquisition System

Get the next-generation Keysight data acquisition (DAQ) system with a three-slot mainframe and your choice of nine plug-in modules. Interface with the DAQ using BenchVue DAQ software, the intuitive graphical front panel with task-oriented, self-guiding menus, or a web browser.

- Features an advanced 6.5-digit internal DMM with improved accuracy and faster measurement speed (50,000 readings / second) to sample more signals.

- Measures very low current ranges (1 μA DC and 100 μA AC) and higher resistance range (1,000 MΩ).

- Compensates using new auto-calibration for internal drifts caused by time and temperature changes.

- Comes with additional GPIB for the DAQ973A; easy connectivity to your PC with LAN and USB.

- Code compatible with Keysight 34970A / 34972A.

- Each module updated with improved switching speeds and accuracies.

- Fast Keysight DAQM900A solid-state multiplexer with scan rate speed of up to 450 channels / second.

- New Keysight DAQM909A 4-channel simultaneous sampling digitizer module with a sampling rate of up to 800 kSa / second.



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| DAQ970A/73A Modules | Description | Key specifications | |
|---|---|---|---|
| DAQM900A | 20-channel solid-state multiplexer | Up to 450 ch/s | Get a Quote > |
| DAQM901A | 20-channel multiplexer plus 2 current channels | Armature 2 / 4 wire, 80 ch/s with DAQ970A/DAQ973A, up to 300 V, 1 A | Get a Quote > |
| DAQM902A | 16-channel multiplexer | Reed 2 / 4 wire, 250 ch/s, up to 300 V, 50 mA | Get a Quote > |
| DAQM903A | 20-channel actuator / GP switch | SPDT / Form C, 120 ch/s, up to 300 V, 1 A | Get a Quote > |
| DAQM904A | 4 x 8 matrix | Armature 2-wire, 120 ch/s, up to 300 V, 1 A | Get a Quote > |
| DAQM905A | 2 GHz, dual 4-channel, RF mux, 50Ω | Common low (not terminated), 60 ch/s up to 42 V, 0.7 A | Get a Quote > |
| DAQM907A | Multifunction module | • Two 8-bit digital I/O ports, up to 42 V, 400 mA<br>• 26-bit 100 kHz event counter, up to 42 V<br>• Two 16-bit analog outputs, up to ±12 V, 10 mA | Get a Quote > |
| DAQM908A | 40-channel single-ended multiplexer | Common low (without 4-wire measurements) 60 ch/s, up to 300 V, 1 A | Get a Quote > |
| DAQM909A | 4-channel simultaneous sampling digitizer | Differential inputs, up to 800 kSa/s sampling rate, 24-bit resolution | Get a Quote > |

**Featured Resource**

# 4 Considerations for Data Acquisition Systems

There is a growing trend across all industries to design feature-rich products. However, you know that the more features added, the more complex the test development becomes.

Explore four considerations for a DAQ that will help you develop a test system optimized for speed and accuracy.

**❯ DOWNLOAD THE EBOOK**

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# N6700 Modular Power System

**N6700**: DC power supply — ideal for automated test systems.

- Small 1U mainframe (400, 600, 1200 W) holds up to four output modules.
- Over 35 programmable DC modules offer unique capabilities, performance, voltage, and current combinations.
- Multiple DC electronic load modules, 100 and 200 W, allow current to be sourced and sinked in the same mainframe.



**N6705C**: DC power analyzer — deep insight without a complex test system.

- Holds and uses up to four N6700 Series modules (600 W total).
- Integrates digital multimeter (DMM), oscilloscope, arb, and data logger capabilities.
- Characterizes and improves battery run time with a source / measure unit  (SMU) and BV9200B analysis software.



❯ **N6700C, N6701C, & N6702C DATA SHEET**

❯ **N6705C DATA SHEET**

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# E36300 Series Triple-Output DC Power Supplies

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- large display with voltages and currents for all three outputs
- accurate programming / readback as low as 0.03%
- low output ripple and noise less than 2 mVpp / 350 uVrms
- precise data logging plus output sequencing and coupling
- convenient front and rear output terminals
- color-coded outputs and individual knobs for voltage and current
- LAN (LXI Core), USB, and GPIB (optional)

| Model | E36311A | | | E36312A | | | E36313A | | |
|---|---|---|---|---|---|---|---|---|---|
| | Economy model | | | Most popular | | | Twice the current | | |
| **Power** | 80 W | | | 80 W | | | 160 W | | |
| **Channels** | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| **DC output Rating (0 to 40 °C)** | 0 to 6 V | 0 to +25 V | 0 to -25 V | 0 to 6 V | 0 to 25 V | 0 to 25 V | 0 to 6 V | 0 to 25 V | 0 to 25 V |
| | 0 to 5 A | 0 to 1 A | 0 to 1 A | 0 to 5 A | 0 to 1 A | 0 to 1 A | 0 to 10 A | 0 to 2 A | 0 to 2 A |
| | Get a Quote > | | | Get a Quote > | | | Get a Quote > | | |



> DATA SHEET

# E36200 Series DC Power Supplies

- single or dual outputs; easily combine the dual outputs into a single output with 400 W
- auto-parallel the Keysight E36233A 400 W autoranging dual output power supply to create a single 40 A (30 V) output
- auto-series the E36233A to create a single 120 V (10A) output
- programming / readback accuracy as low as 0.03%
- output ripple and noise < 350 µVrms
- data logging plus output sequencing and coupling
- front and rear output terminals
- color-coded outputs and individual knobs for voltage and current
- LAN, USB, and GPIB (optional)

| Model | E36231A | | E36232A | | E36233A | | E36234A | |
|---|---|---|---|---|---|---|---|---|
| Power | 200 W | | 200 W | | 400 W | | 400 W | |
| Channels | 1 | | 1 | | 1 | 2 | 1 | 2 |
| DC output Rating (0 to 40 °C) | 0 to 30 V | 0 to 20 A | 0 to 60 V | 0 to 10 A | 0 to 30 V | 0 to 20 A | 0 to 60 V | 0 to 10 A |
| | Get a Quote > | | Get a Quote > | | Get a Quote > | | Get a Quote > | |



DATA SHEET

**Featured Resource**

# 4 Ways to Build Your Power Supply Skills

Today's designs place higher demands on the systems that power them. You may find that more of your design problems are created by these power systems.

Use these four practical tips to ensure you deliver reliable power during the design phase and get the most out of your power supply.

**❯ DOWNLOAD THE EBOOK**

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SOFTWARE INCLUDED

# B2900 Series Precision Source Measure Units (SMUs)

## B2900B/BL Series precision SMUs

- minimum source resolution at 10 fA / 100 nV;
- minimum measurement resolution at 10 fA / 100 nV
- maximum output at 210 V, 3.03 A DC
- waveform generation (arbitrary) and digitizing capabilities from 10 µs interval
- integrated 4-quadrant source and measurement capabilities
- 4.3-inch color display supports graphical and numerical view modes
- application software to facilitate PC-based instrument control (free)
- high throughput and SCPI command supporting conventional SMU command set

## B2960B/BL Series low-noise power source

- 6.5 digit 2-channel, wide and bipolar voltage / current sourcing (100 nV - 210 V / 10 fA - 10.5 A, 31.8 W)
- noise performance at 10 µVrms, 1nVrms / √Hz with external filter
- precision arbitrary waveform capability with support for seven built-in functions and user-defined waveforms (1 MHz – 10 kHz)
- 4.3-inch color display supports both graphical and numerical view modes
- application software to facilitate PC-based instrument control (free)
- high throughput and SCPI command supporting conventional SMU command set

> B2900B DATA SHEET

> B2960B DATA SHEET

**Get a Quote >**

# EL30000 Series Bench DC Electronic Loads

The Keysight EL30000 Series bench DC electronic loads provide superior performance in a compact bench form factor.

- Test up to 600 W, 1 or 2 inputs.
- Operate in constant current (CC), constant voltage (CV), constant resistance (CR), or constant power (CP) modes.
- Make accurate measurements with excellent programming / feedback accuracy.
- Perform static and dynamic tests.
- View measurements on a 4.3-inch LCD color display.
- Transfer data via USB drive, LAN, USB, or GPIB.

| Model | Number of inputs | Input power | DC Input voltage | DC Input current | |
|--------|------------------|-------------|------------------|------------------|--|
| EL34143A | 1 | 350 W | 150 V | 60 A | Get a Quote > |
| EL34243A | 2 | 600 W | 150 V | 60 A per input, 120 A parallel | Get a Quote > |

## Need more power?
See the Keysight E36200 Series 200 and 400 W autoranging power supplies.



- DATA SHEET
- ELECTRONIC LOAD FUNDAMENTALS WHITE PAPER

# 33500B and 33600A Series Trueform Waveform Generators

- Generate Trueform arbitrary waveforms with high fidelity and less jitter and harmonic distortion.
- Access ease-of-use features, such as modulation, sweep, burst, dual-channel coupling, and IQ baseband signal player.

| Model | Description | Channels | Frequency range | Pulse | Arbitrary waveforms | | | |
|-------|-------------|----------|-----------------|-------|---------------------|--------|-------------|----------------|
| | | | | | Std/Opt arb | # Bits | Sample rate | Memory/ Channel |
| 33509B 33510B | Exclusive Trueform waveform technology with < 40 ps jitter and < 0.04% THD. | 1 2 | 20 MHz | 20 MHz | Optional | 16 | 160 MSa/s | 1 M Standard, 16 M Optional |
| 33511B 33512B | | 1 2 | | | Standard | | | |
| 33519B 35520B | | 1 2 | 30 MHz | 30 MHz | Optional | | 250 MSa/s | |
| 33521B 33522B | | 1 2 | | | Standard | | | |
| 33611A 33612A | Exclusive Trueform waveform technology at higher frequency ranges with < 1 ps jitter < 0.03% THD. | 1 2 | 80 MHz | 80 MHz | Standard | 14 | 660 MSa/s | 4 M Standard, 64 M Optional |
| 33621A 33622A | | 1 2 | 120 MHz | 100 MHz | | | 1 GSa/s | |



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# Truevolt Digital Multimeters

- 6.5- and 7.5-digit performance
- graphical capabilities such as trend and histogram charts
- measure very low current, 1 μA range with pA resolution, enabling measurements on very low power devices
- auto-calibration to compensate for temperature drift
- basic measurements such as DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity, diode, temperature, and capacitance

| Model | Description | Digits of resolution | Max reading rate at 4½ digits (RDGS/S) | Built-in PC interfaces |
|---|---|---|---|---|
| 34460A | Display DMM results in histogram, bar, and trend charts on color graphical display for easy monitoring and to speed up statistical analysis | 6.5 | 300 | USB; optional GPIB, LAN |
| 34461A | | | 1,000 | USB, LAN; optional GPIB |
| 34465A | Comes with a digitizer and advanced triggering capability so you can make more measurements with higher speed, better accuracy, and more memory | 6.5 | 50,000 | USB, LAN; optional GPIB |
| 34470A | | 7.5 | | |



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# 3458A Digital Multimeter, 8.5-Digit

- Get 8.5-digit resolution with 0.1 ppm transfer accuracy.

- Perform accurate measurements with 8 ppm (0.0008%) DCV accuracy (4 ppm optional).

- Experience a maximum reading rate of 100,000 readings / second.

- Execute measurements that include DC and AC voltage, DC and AC current.

- Measure using 2- and 4-wire resistance, frequency, and period.

- Use the 148K reading memory for prolonged data logging (now comes standard).

- RoHs compliant.



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**Featured Resource**

# Choosing the Right DMM for Your Sensor Measurement Needs

The use of sensors continues to grow as electronic devices become more intelligent and play essential roles in our daily lives. There are hundreds of types of sensors in the market and the right digital multimeter (DMM) will help you design accurate and robust products.

Learn the essential concepts of sensor functionality, and considerations for selecting the right DMM.

**⊙ DOWNLOAD THE EBOOK**

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SOFTWARE INCLUDED

# E5063A ENA Vector Network Analyzer*

- frequency options to suit your test needs and budget, upgradable at any time
- PCB manufacturing test capability with Option 011
- support for six languages via softkey and the embedded help manual in English / Simplified Chinese
- support all Keysight calibration kits, including the Keysight N755xA economy ECal module

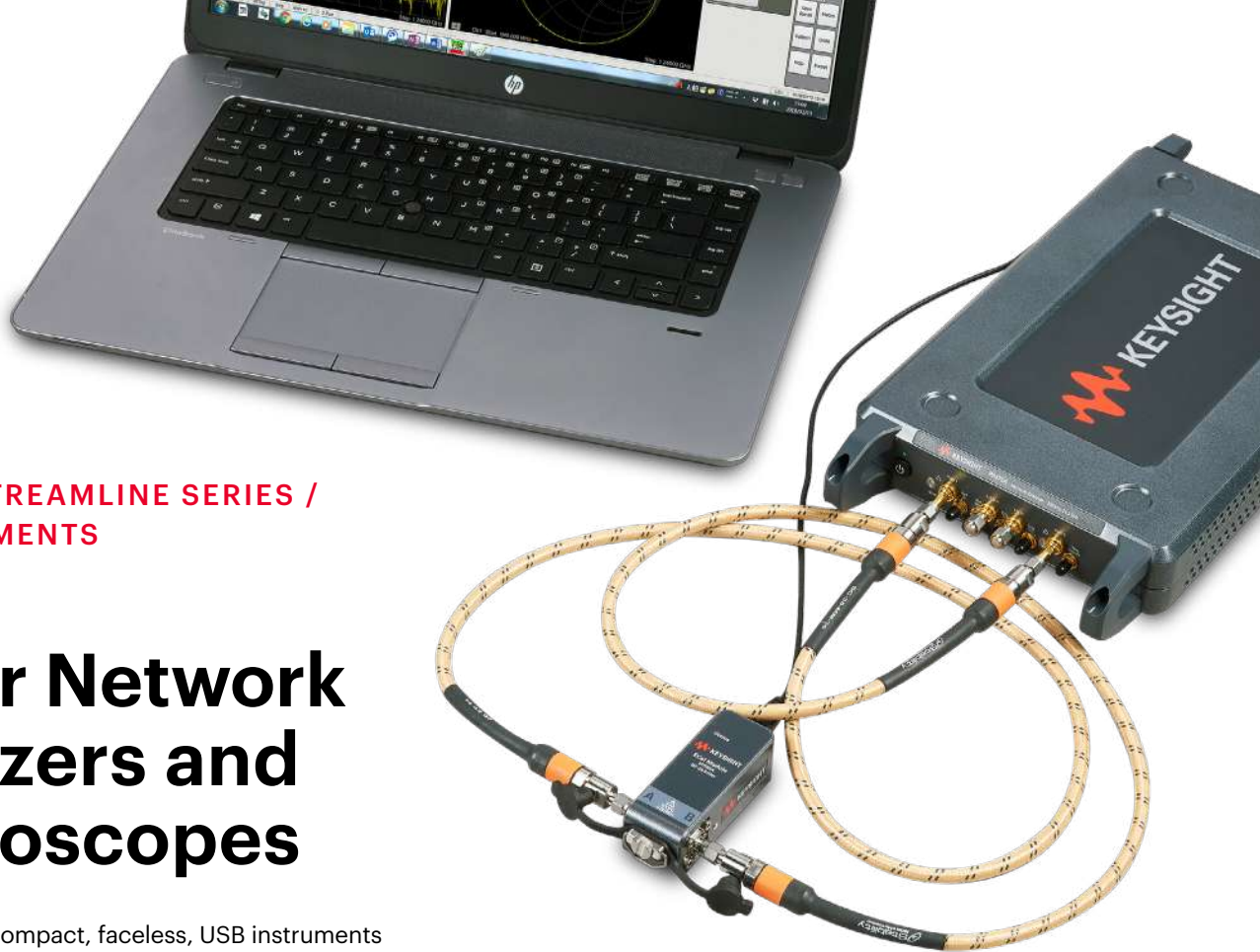| ENA Series E5063A | |
|---|---|
| Frequency | 100 kHz to 500 M, 1.5, 3, 4.5, 6.5, 8.5, 14 or 18 GHz |
| Test port | 2-port 50 Ω S-parameter test set |
| Dynamic range | 117 dB (spec.), 122 dB (typ.) |
| Trace noise | 0.005 dBrms (spec.), 0.015 dBrms (typ.) |
| Source power | –20 to 0 dBm |
| Key software capability | Fixture simulator, Time domain analysis/Test Wizard option[1], Wireless power transfer analysis[1], and Materials measurement[2] |
| Interface | LAN, USB (front 2, rear 4), USBTMC, GPIB[1], Handler I/O[1] |

1. Optional capability.

2. External software; Keysight N1500A Material Measurement Suite required.

* From selected distributors only



> **DATA SHEET**

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# Vector Network Analyzers and Oscilloscopes

- multiple new compact, faceless, USB instruments
- common technology and measurement capabilities as benchtop and modular instruments
- perfect for component and subassembly test, R&D labs, and light manufacturing
- small footprint in size, weight, and power
- ideal for a rack at 1U high

| | Vector Network Analyzer (VNA)* | | Oscilloscope |
|---|---|---|---|
| **Models** | P9370A/B, P9371A/B, P9372A/B, P9373A/B, P9374A/B P9375A/B, P9377B, P9382B, P9384B | | P9241A, P9242A, P9243A |
| **Bandwidth** | 300 kHz to 26.5 GHz (P937xA)<br>9 kHz to 20 GHz (P937xB/P938xB)<br>100 kHz to 44 GHz (P937xB) | | 200 MHz, 500 MHz, and 1 GHz |
| **Capabilities** | • Full 2-port (P937xA/B) and 4-port (P938xB) VNA<br>• Ability to extend the number of ports<br>• Same calibration and metrology as all trusted Keysight VNAs | | • 2 analog channels<br>• 5 GSa/s<br>• 1,000,000 wfms/s<br>• Zone triggering<br>• 6-in-1 instrument: arbitrary waveform generator, frequency response analyzer, digital voltmeter, counter, protocol analyzer |
| | P397XA DATA SHEET | P93XXB DATA SHEET | DATA SHEET |
| | Get a Quote > | | Get a Quote > |

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# Instrument Control Software Applications

**PATHWAVE**

- Use to connect instruments, record results quickly, and visualize measurements.
- Save time with automated test sequences.
- Analyze and export data in multiple formats.

❯ **TECHNICAL OVERVIEW**

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## Control Multiple Instruments

Drag-and-drop your way to connect instruments, record results, and visualize measurements across multiple instruments simultaneously, without the need for programming.

## Access Integrated Apps

Choose from a wide array of apps with powerful features to simplify your test workflow — from measurement setup and automation to exporting data and analyzing in-depth results — in one software application. The applications support hundreds of Keysight instruments and are continually expanding.

## Automate Test Sequences

Rapidly build custom test sequences with an intuitive interface to quickly create tests that previously required days of traditional programming. The integrated Test Flow application makes it simple to drag and drop controls or measurements into a sequence for rapid test development.

## Analyze and Export Data

Get easy access to extensive data, screen captures, trace, and measurement logging capabilities. Export your data in multiple formats in just a few clicks.

## Instrument Compatibility

- data acquisition units, digital multimeters, and electronic loads
- FieldFox handheld analyzers, function generators, and USB modular products
- universal counters, oscilloscopes, and photovoltaic array simulators
- power analyzers, power meters and power sensors, and power supplies
- signal generators, spectrum analyzers, and network analyzers

# Save 25% on InfiniiVision Oscilloscope

Save 25% on InfiniiVision oscilloscope application bundles! These power and jitter pre-configured bundles are available on the InfiniiVision 3000T, 4000, and 6000 X-Series oscilloscopes.

**⊘ LEARN MORE**

| Bundle option | Discount | Power | Jitter |
|---|---|---|---|
| **Better** | 25% | **DSOX3054PWR**<br><br>• DSOX3054T: 4-channel, 500-MHz oscilloscope<br>• D3000PWRB: power analysis software option<br>• DSOX3WAVEGEN: function / arbitrary waveform generator<br>• N2790A: 100-MHz high-voltage differential active probe<br>• 1147B: 50-MHz current probe<br>• U1880A: deskew fixture<br>• DSOXLAN: LAN / VGA module | **DSOX6004JIT**<br><br>• DSOX6004A: 4-channel, 1-GHz oscilloscope<br>• D6000BDLB: ultimate bundle software option<br>• DSOX6WAVEGEN2: 2-channel function / arbitrary waveform generator<br>• N2750A: 1.5-GHz differential active probe |
| **Best** | 25% | **MSOX4154PWR**<br><br>• MSOX4154A: 4+16 channel, 1.5-GHz mixed-signal oscilloscope<br>• D4000BDLB: ultimate bundle software option<br>• DSOX4WAVEGEN2: 2-channel function / arbitrary waveform generator<br>• N2790A: 100-MHz high-voltage differential active probe<br>• N7026A: 150-MHz high-sensitivity current probe<br>• U1880A: deskew fixture | **MSOX6004JIT**<br><br>• MSOX6004A: 4+16 channel, 1-GHz mixed-signal oscilloscope<br>• DSOX6004A-02G: 2.5-GHz bandwidth option<br>• D6000BDLB: ultimate bundle software option<br>• DSOX6WAVEGEN2: 2-channel function / arbitrary waveform generator<br>• N2751A: 3.5-GHz differential active probe |

# RF Signal Analyzer and Signal Generator Bundle

Save up to 20% on essential RF signal analyzer and signal generator bundles. The Keysight N9000B CXA signal analyzer and Keysight N5166B CXG signal generator provide an easy-to-use, solid foundation for accurate, cost-effective RF testing in general-purpose applications.

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