
















## Index

Model	Description	Digits of resolution	Measurement speed (reading/s at 4½ digits)	Basic 1-yr DCV accuracy	Basic measurements	Connectivity & software	Page:
 U3401A/U3402A	Benchtop DMM, dual display  Elegantly simple and affordable DMMs with basic and good capabilities	4½ (U3401A) 5½ (U3402A)	N/A	0.0120%	DCV, ACV, DCI, ACI, 2-wire resistance (4-wire on U3402A), frequency, continuity, and diode	N/A	4
 U3606A/U3606B	5.5-digit DMM with built-in 30 W power supply  Halves bench/rack-space need for two instruments	5½	26	0.0250%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, continuity, diode, and capacitance  30-W with four output ranges, OVP/OCV, auto scan/ramp and square wave generator	USB 2.0, GPIB	5
 34450A	5.5 digit bench digital multimeter  OLED dual display	5½	190	0.0150%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, continuity, diode, capacitance, and temperature	USB 2.0, Serial Interface (RS-232), GPIB BenchVue software enabled (page 25)	6
 34460A/34461A	Bench/System DMM  Graphical color dual-line display with histogram and trend charts	6½	300/1000	0.0075/0.0035%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity, diode, temperature, capacitance	USB, LAN/LXI Core, GPIB, BenchVue software enabled (page 25)	7
 34465A	Bench/System DMM  Includes 34461A features plus data logging, digitizing and auto calibration	6½	50,000	0.0030%	DCV, ACV, DCI, ACI, 2- and 4-wire, resistance, frequency, period, continuity, diode, temperature, capacitance, DC ratio	USB, LAN/LXI Core, GPIB optional, BenchVue software enabled (page 25)	8
 34470A	Bench/System DMM  Includes 34461A features plus data logging, digitizing and auto calibration	7½	50,000	0.0016%	DCV, ACV, DCI, ACI, 2- and 4-wire, resistance, frequency, period, continuity, diode, temperature, capacitance, DC ratio	USB, LAN/LXI Core, GPIB optional, BenchVue software enabled (page 25)	8
 34401A	Bench/System DMM  Industry standard for accuracy, speed, measurement ease and versatility	6½	1000	0.0035%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity, and diode.	GPIB, RS-232, DMM Connectivity BenchVue software enabled (page 25)	9
 34410A/34411A	Bench/System DMM, dual-line display  Highest through-put of benchtop DMMs	6½	10,000 (34410A) 50,000 (34411A)	0.0030%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity test, capacitance, temperature	USB, LAN/LXI Core, GPIB, BenchVue software enabled (page 25)	10

## Index

Model	Description	Digits of resolution	Measurement speed (reading/s at 4½ digits)	Basic 1-yr DCV accuracy	Basic measurements	Connectivity & software	Page:
 34420A	Nanovolt/μΩ meter Very accurate, low-level measurements	7½	250	0.0030%	DCV, DCI, 2- and 4-wire resistance, 2 channel scanning, temperature	GPIO, RS-232, Intuilink software	11
 3458A	Bench/System DMM The fastest, most flexible and most accurate multimeter by Keysight Ideal multimeter for demanding applications	8½	100000 (@ 4½ digits)	0.0008% (0.0004% optional)	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, and temperature	GPIO	12
 U1177A	Infrared (IR)-to-Bluetooth Adapter Enables Bluetooth connection to compatible Keysight handhelds.	N/A	N/A	N/A	N/A	Keysight Mobile Meter Keysight Mobile Logger	13
 U1190 Series	Handheld DMM Illuminate test area and measure in safer manner	3½	3	0.5%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity, diode, capacitance, temperature	N/A	14
 U1210 Series	Handheld clamp meter For convenient high current measurements	3½	7	0.5%	DCV, ACV, DCI, ACI, 2-wire resistance, frequency, continuity, diode test, capacitance, temperature	IR-USB, Bluetooth	15
 U1230 Series	Handheld DMM Retool your expectations with the Keysight U1230 Series handheld DMM	3½	5	0.5%	DCV, ACV, DCI, ACI, resistance, frequency, continuity, diode test, capacitance, temperature	IR-USB, Bluetooth	16
 U1240 Series	Handheld DMM Feature-rich and robust DMMs	4	7	0.09%	DCV, DCI, ACV, ACI, 2-wire resistance, frequency, continuity, diode test, switch counter, harmonic ratio, capacitance, temperature, 4-20 mA % scale	IR-USB, Bluetooth	17
 U1250 Series	Handheld DMM Versatile, high performance DMMs	4½	7	0.025%	DCV, DCI, ACV, ACI, 2-wire resistance, frequency, continuity, diode test, dB, capacitance, temperature, frequency counter, 4-20 mA % scale	IR-USB, Bluetooth	18
 U1270 Series	Handheld DMM More functionality in a single tool	4½	7	0.05%	DCV, DCI, ACV, ACI, 2-wire resistance, frequency, continuity, diode test, dB, capacitance, temperature, 4-20 mA % scale	IR-USB, Bluetooth	19
 U1401B	Handheld multi-function calibrator/meter Calibrator and DMM in one tool	4½	3	0.003%	DCV, ACV, DCI, ACI, 2-wire resistance, temperature, frequency, diode test, continuity, pulse width, duty cycle	IR-USB	20
 U2741A	USB Modular DMM Compact, with plug-and-play simplicity	5½	100	0.02%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency and period, continuity, diode test, temperature	USB 2.0	21
 M9181A	PXI DMM - basic features. Best for functional test when there are multiple tests with range or function changes.	6½	150	.009%	DCV, DCI, ACV, ACI, 2- and 4-wire resistance	PXI module; IVI-C, IVI-COM, LabVIEW, MATLAB drivers. Signametrics compatible driver is also available	22
 M9182A/M9183A	PXI DMM - enhanced performance models. Best for functional test when there are multiple tests with range or function changes.	6½	4,500 for M9182A 15,000 for M9183A	.004%	All M9181A measurements, plus frequency/period, capacitance, and temperature. M9183A includes duty cycle, counter/totalizer, and DC source.	PXI-hybrid module; IVI-C, IVI-COM, LabVIEW, MATLAB drivers. Signametrics compatible driver is also available	22

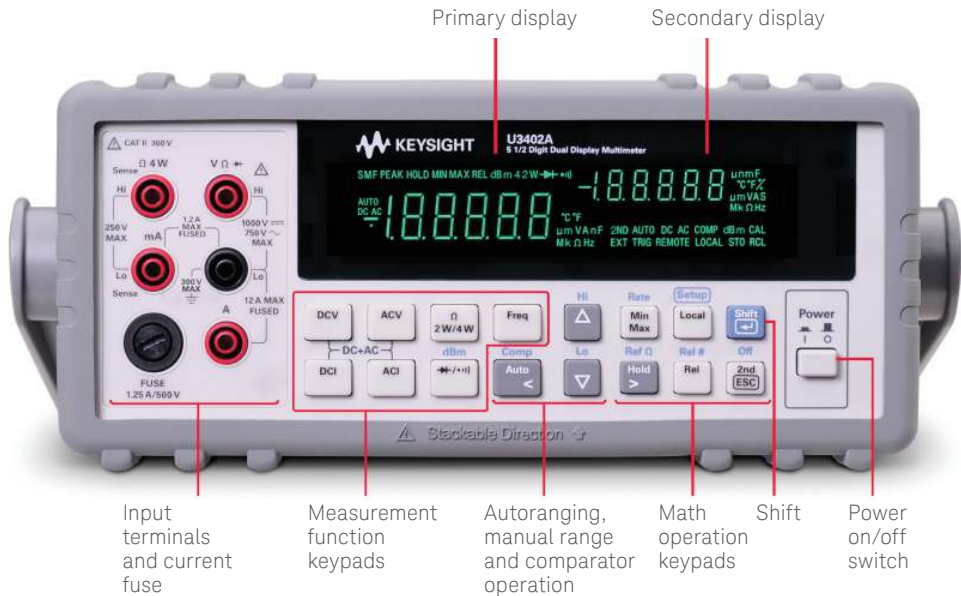
Basic + good = elegant simplicity

U3400 Series 4½ and 5½ digit multimeters



Key features

- Up to 120,000 counts resolution
- Up to six built-in math functions – dBm, Relative, Min/Max, Compare, Hold
- Dual display on bright VFD
- Selectable resolutions for variable measurement speeds
- Kensington lock slot security



Key specifications

DCV accuracy	0.02%
Reading speed	N/A
Measurement functions	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency, diode, continuity
Type of connectivity	N/A

Technical datasheet:  
Literature number 5990-3970EN

Ordering information

- U3401A 4½ digit dual display digital multimeter
- U3402A 5½ digit dual display digital multimeter

- Each U3400 Series includes:
- Quick start guide
  - Product reference CD
  - Certificate of calibration (CoC)
  - 34138A test lead kit
  - AC power cord

- Options:
- U3400A-100      USB to RS232 cable
  - U3400A-1CM      Rack mount kit
  - U3400A-1CN      Dual flange kit

## Two instruments in one

U3606A/U3606B multimeter|DC power supply



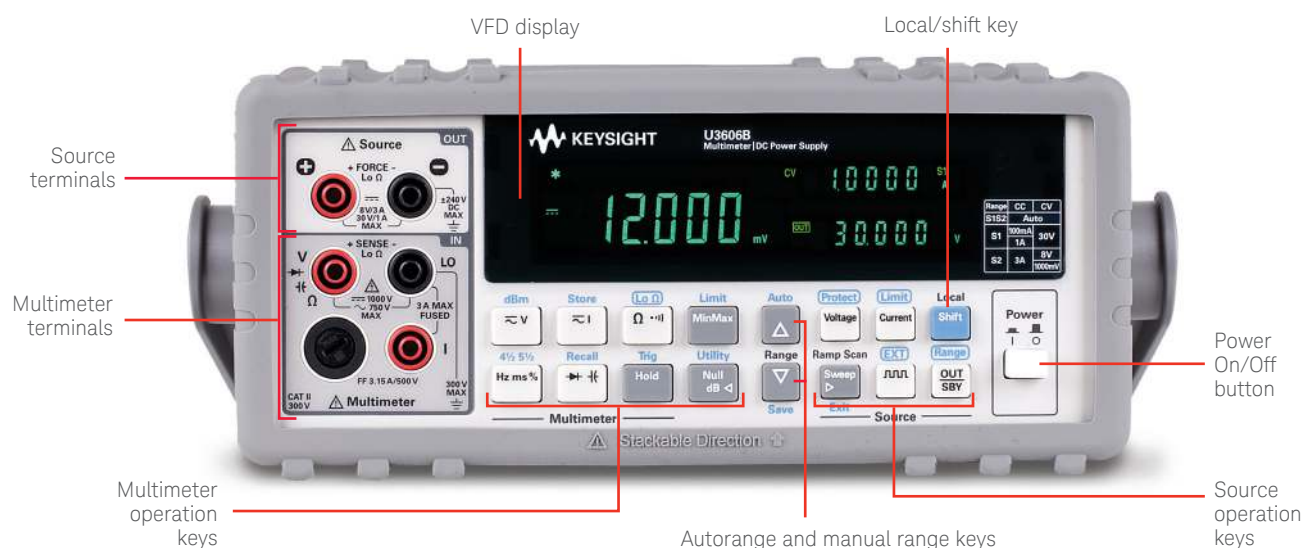
### Key features

Full-featured DMM

- 8 built-in math functions
- 120,000 counts resolution
- 4-wire  $m\Omega$  measurement with 0.001  $m\Omega$  resolution

Full-featured DC power supply

- 30 W, 30 V/1 A, 100 mA/30 V, 8 V/3 A and
- 1000 mV/3 A ranges
- OVP and OCP load protection
- Auto ramp and scan for multi-level DC bias testing
- Up to 4.8 kHz square-wave output



### Key specifications

DCV accuracy	0.025%
Reading speed	26 readings/second
Measurement functions	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency, diode, continuity, and capacitance
Type of connectivity	GPIO, USB 2.0

Technical datasheet:

Literature number 5991-2849EN

### Ordering information

U3606A 5½ digit digital multimeter|DC power supply  
U3606B 5½ digit digital multimeter|DC power supply

Each unit includes:

- Quick start guide
- Product reference CD
- Keysight Technologies, Inc. IO Library Suite
- Certificate of calibration
- U8201A combo test lead kit
- USB 2.0 high-speed type A to type B cable
- AC power cord

## Turbo charge your measurements with one of the fastest tools in its class

### 34450A bench digital multimeter



#### Key features

- Fast reading speed up to 190 readings/sec
- Multiple connectivity options – USB 2.0, Serial Interface (RS-232) and GPIB
- Up to 50,000 memory points for data logging
- Built-in histogram function
- With Fluke 45 and Fluke 8808A code compatibility

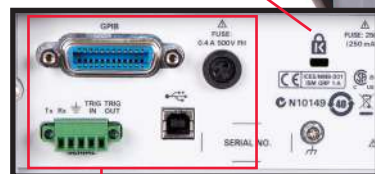
5.5 digit OLED dual display allows clear and quick view of measurements



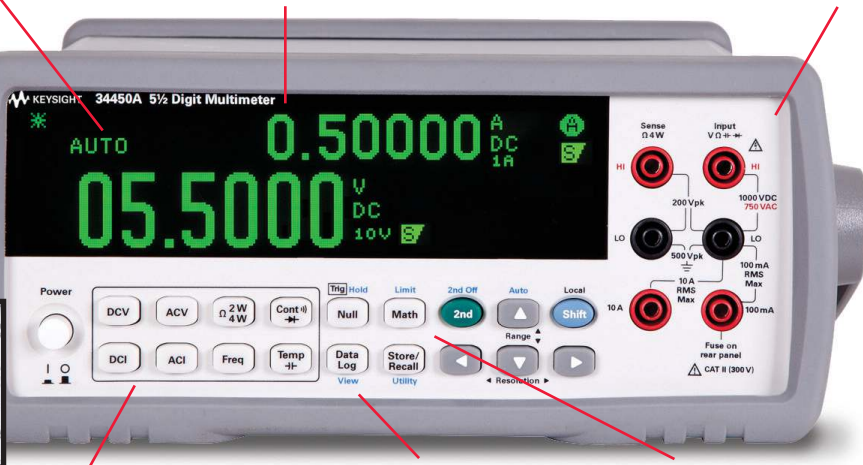
Fast 190 readings/sec and 0.015% DCV accuracy to help you achieve throughput breakthrough

Input terminals

Kensington lock to better secure the unit



Multiple choices of connectivity and trigger in/out capability for production data analysis



Eleven measurement functions

Up to 50,000 memory points for data logging and histogram function

Built-in math functions

#### Key specifications

DCV accuracy	0.015%
Reading speed	190 readings/s
Measurement functions	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency, diode, continuity, capacitance, temperature
Type of connectivity	USB 2.0, Serial Interface (RS-232) and GPIB

Technical datasheet:

Literature number 5991-1133EN

#### Ordering information

34450A 5½ digit dual display digital multimeter

Each 34450A includes:

- Test lead kit
- Power cord
- USB interface cable
- Quick start guide
- Product reference CD
- Keysight IO Library Suite CD-ROM

Upgradable options:

- 3445GPBU GPIB connectivity upgrade
- 3445MEMU 50,000 memory points upgrade for data logging
- BenchVue software enabled (see page 25)



## The new standard for uncompromising performance in bench and system test

### 34460A/34461A 6½ digit Truevolt DMMs



#### Key features

Display DMM results in ways you never have before

- Color, graphical display with built-in bar chart, histogram, trend (34461A only), math, and statistics
- Save and document your DMM's data from your PC, mobile device, or IO of choice

Measure with unquestioned Truevolt confidence

- Digital AC, lowest measurement noise, ISO/IEC derived and compliant specifications

- 1000 V max voltage input, 3 A/10 A (34461A) max current input

Move to the next generation 34401A DMM with 100% assurance

- Industry's only 100% drop-in, SCPI compatible replacement for the Keysight 34401A DMM (34461A)



#### Key specifications

DCV accuracy	0.0075/0.0035%
Reading speed – 4½ Digits	300/1000 readings/s
Measurements	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, diode, continuity, temperature
Type of connectivity	USB, LAN/LXI Core (Option on 34460A, Std on 34461A) GPIB (Optional)

Technical datasheet:

Literature number 5991-1983EN

#### Ordering information

34460A 6½ digit, basic Truevolt DMM

34461A 6½ digit, 34401A replacement, Truevolt DMM

Upgradeable options:

- 3446ACCU – Accessory kit for 34460A (documentation, test leads, USB cable)
- 3446GPBU – GPIB user installable interface module
- 3446LANU – Enable rear panel LAN/LXI web interface, external triggering for 34460A
- 3446SECU – Enable NISPOM and file security
- BenchVue software enabled (see page 25)

## The new standard for uncompromising performance in bench and system test

34465A 6½, 34470A 7½ digit performance Truevolt DMMs



### Key features

#### Get more insight quickly

**Truevolt** DMM's graphical capabilities such as trend and histogram charts offer more insights quickly. Both models also provide a data logging mode for easier trend analysis and a digitizing mode for capturing transients.

#### Low-current measurements

The ability to measure very low current, 1 µA range with pA resolution, allows you to make measurements on very low power devices.

#### Maintaining calibration

Auto calibration allows you to compensate for temperature drift so you can maintain measurement accuracy throughout your workday.



### Key specifications

DCV accuracy	0.0030/0.0016%
Reading speed – 4½ Digits	50,000 readings/s
Measurements	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, diode, continuity, temperature capacitance, DC ratio
Type of connectivity	USB, LAN/LXI Core GPIB (Optional)

Technical datasheet:

Literature number 5991-1983EN

### Ordering information

34465A 6½ digit, performance Truevolt DMM (34410A/11A replacement)

34470A 7½ digit, performance Truevolt DMM

Upgradeable options:

- 3446GPBU – GPIB user installable interface module
- 3446SECU – Enable NISPOM and file security
- 3446DIGU – Enable digitizing and advanced triggering
- 3446MEMU – Enable 2 million readings of memory
- BenchVue software enabled (see page 25)



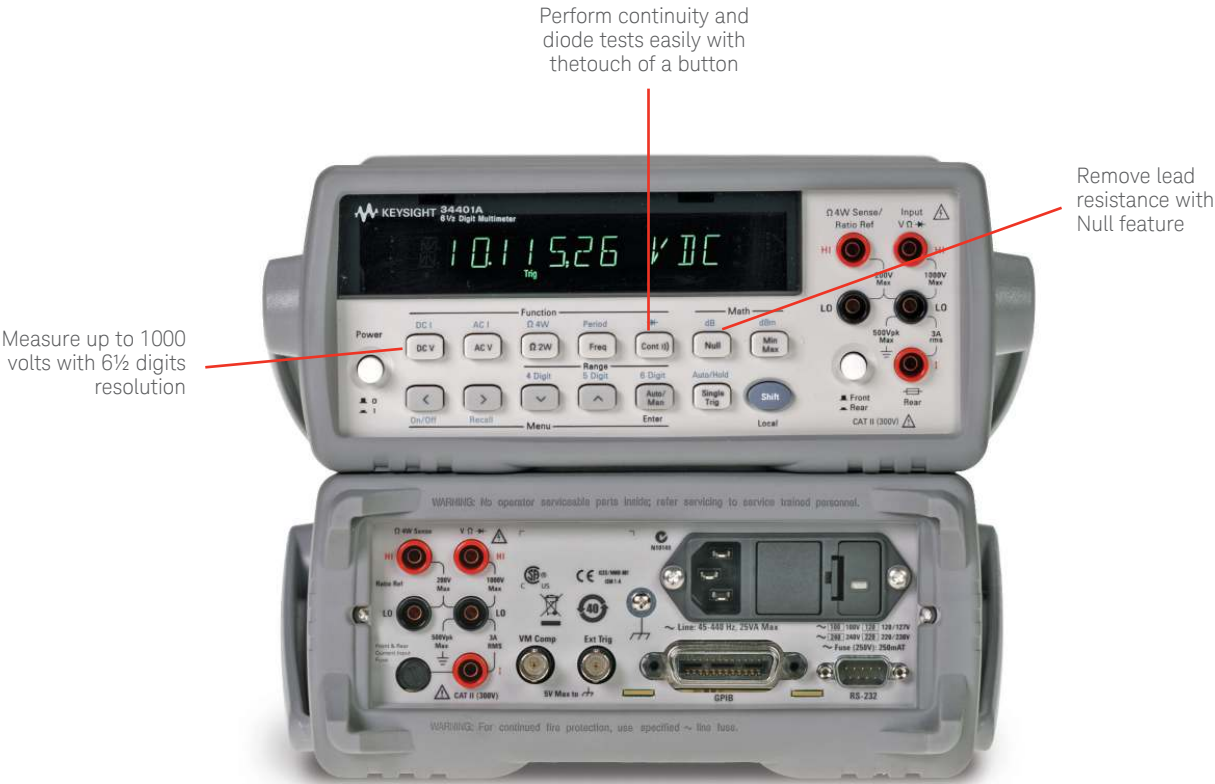
Uncompromising performance for benchtop and system testing



34401A 6½ digit multimeter (Replaced by 34461A 61/2 digit Truevolt multimeter)

Key features

- 1000 V maximum input
- SCPI commands standard
- Intuilink Connectivity Software included



Key specifications

DCV accuracy	0.0035%
Reading speed – DCV	1000 readings/second
Measurements	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, diode, continuity
Type of connectivity	GPiB, RS-232

Technical datasheet:  
Literature number 5968-0162EN

Ordering information

34401A 6½ digit digital multimeter

- Each 34401A includes:
- Test lead kit with probe, alligator and grabber
  - Operating manual
  - Service manual
  - Certificate of calibration
  - Test report
  - AC power cord

BenchVue software enabled (see page 25)

Affordable yet feature-rich measurement tool  
34410A/34411A 6½ digit multimeter

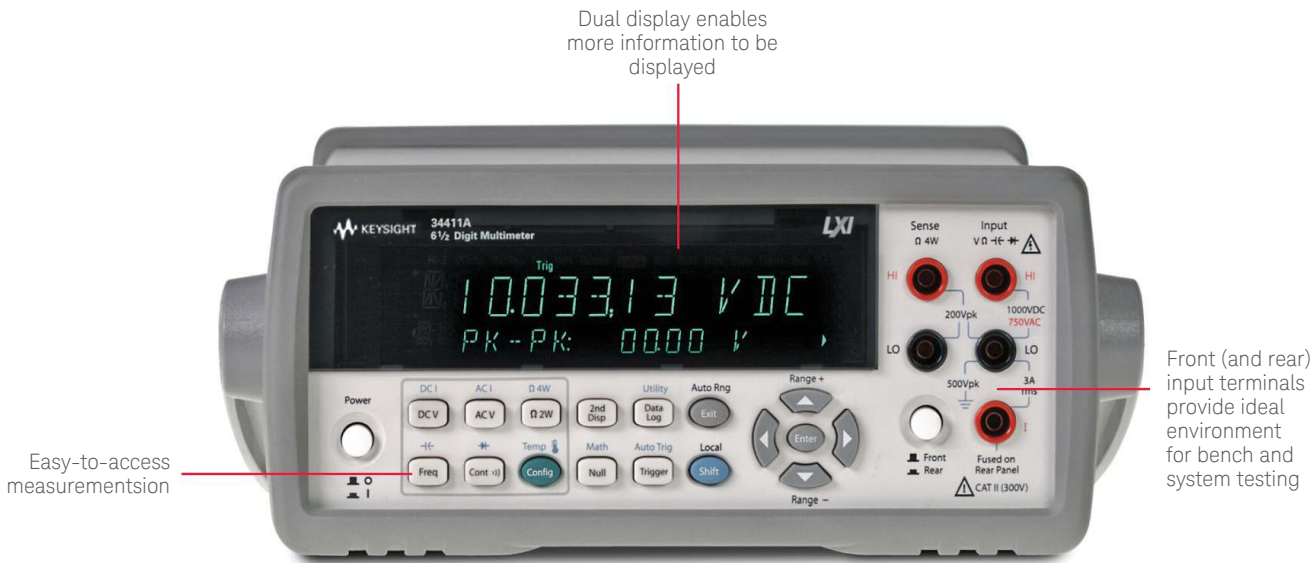


Key features

- Keysight 34410A 6½ digit high-performance DMM

  - Expanded measurement ranges
  - Data logger with 50k reading non-volatile memory
- Keysight 34411A 6½ digit enhanced-performance DMM

  - All features of the 34410A plus:
  - 50,000 readings/s at 4½ digits direct to PC
  - 1 million volatile reading memory
  - Analog level triggering
  - Programmable pre/post triggering



Key specifications

DCV accuracy	0.0030%
Reading speed – DCV	34410A 10,000 readings/s 34411A 50,000 readings/s
Measurements	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, continuity, diode, capacitance, temperature
Type of connectivity	GPIB, USB 2.0, LAN (LXI Core)

Technical datasheet:  
Literature number 5989-3738EN

Ordering information

34410A 6½ digit digital multimeter  
34411A 6½ digit digital multimeter

- Each 34410A/34411A includes:
- Test lead kit with probes and SMT attachments
  - Test report
  - AC power cord
  - USB interface cable

BenchVue software enabled (see page 25)

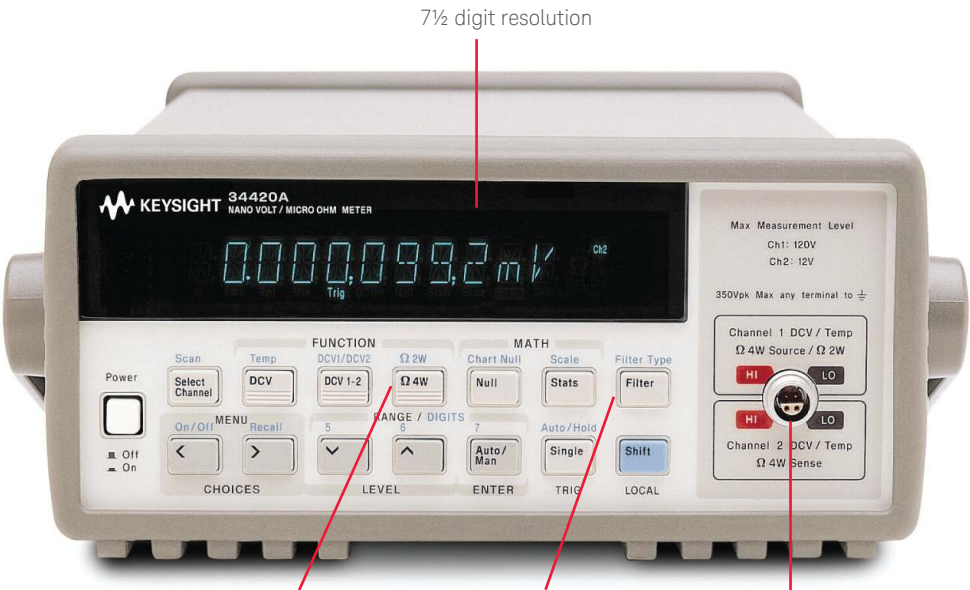
Nanovolt performance at a micro-volt price

34420A 7½ digit multimeter



Key features

- 100 pV/ 100 nV/2 sensitivity
- 1.3 nVrms/8 nVpp noise performance
- Built-in low noise 2-channel scanner
- Direct SPRT, RTD, thermistor, and thermocouple measurements



Three resistance modes are included:

- Standard
- Low-power
- Voltage-limited for dry-circuit testing

Selectable analog or digital filtering

Built-in low noise two channel scanner with ratio and difference functions

Key specifications

DCV accuracy	0.0030%
Reading speed – DCV	250 readings/s
Measurements	DCV, 2- and 4-wire resistance, temperature
Type of connectivity	GPIO, RS-232

Technical datasheet:  
Literature number 5968-0161EN

Ordering information

34420A nanovolt/micro-ohm meter

- Each 34420A includes:
- Low-thermal input cable (34102A)
  - Low-thermal shorting plug (34103A)
  - Kelvin clip set (11062A)
  - Operating manual
  - Service manual
  - Quick reference guide
  - Test report with cal

Shattering performance barriers of speed and accuracy

3458A 8½ digit multimeter



Key features

- Maximum sensitivity: 10 nV
- Programmable integration times from 500 ns to 1 sec
- Two-source (10 V, 10 kΩ) calibration, including AC
- Self-adjusting, self-verifying auto-calibration for all functions and ranges, including AC
- Multimeter Language (ML) compatible

16 character alpha-numeric display to easily read data, messages and commands

Gold-plated tellurium copper terminals (volts/ohms/ratio) for minimum thermal emf



Guard terminal and switch for maximum common mode noise rejection

Shifted keys (f0 through f9) access up to ten user-defined setups

Key specifications

DCV accuracy	0.0008% (Optional 0.0004%)
Reading speed DVC	Up to 100,000 readings/second (41/2 digits)
Measurements	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency
Type of connectivity	GPIO

Ordering information

3458A multimeter

- Each 3458A includes:
- Test lead set (34118B)
  - Power cord
  - Operating manual
  - Calibration manual
  - Assembly level repair manual
  - Quick reference guide

Technical datasheet:  
Literature number 5965-4971E

## Go further with Keysight handheld digital multimeters

### U1177A Infrared (IR)-to-Bluetooth Adapter

Monitoring multiple measurements simultaneously and wirelessly is now made possible with the U1177A Infrared (IR)-to-Bluetooth adapter. To achieve this, simply install the free software on your Android smart phone or tablet,

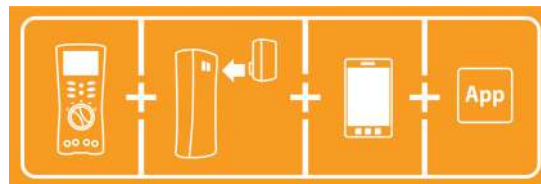
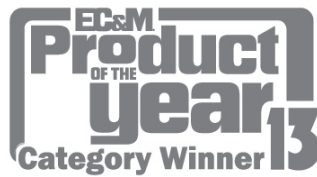
and connect it to any Keysight handheld digital multimeter (HHDMM) that is attached to a U1177A. With this, you not only get real-time measurement monitoring and data logging, both apply to Android devices and PCs as well.

#### Key features

- Compatible with all Keysight U1200 Series handheld meters and U1210 Series handheld clamp meters
- Monitor up to 3 multimeter measurements at the same time with Keysight Mobile Meter software
- Perform real-time data logging with Keysight Mobile Logger software



Keysight U1177A Infrared (IR)-to-Bluetooth adapter



Keysight wireless remote connectivity solution

# Ergonomically designed for safer measurements

## U1190 Series handheld clamp meters



### Key features

- Vsense to perform non-contact voltage detection<sup>1</sup>
- Built-in LED flashlight to illuminate test area<sup>1</sup>
- Current measurement up to 600 A<sup>2</sup>
- Digital multimeter (DMM) with Resistance, Capacitance<sup>1</sup>, DCV, ACV, DCμA<sup>3</sup>, ACμA<sup>3</sup>, Continuity and Diode test measurements
- CAT III 600 V / CAT IV 300 V safety ratings

1. Only for U1192A, U1193A and U1194A  
2. Only for U1193A and U1194A  
3. Only for U1194A



1. Exclusive to U1192A, U1193A, and U1194A  
2. Exclusive to U1194A

### Key specifications

DCV accuracy	0.5+3
Reading speed	3 readings/s
Measurement functions	DCV, ACV, DCI, ACI, resistance, capacitance, diode test, temperature, frequency, continuity
Type of connectivity	N/A

Technical datasheet:  
Literature number 5990-8646EN

### Ordering information

- U1191A clamp meter
- U1192A clamp meter
- U1193A clamp meter
- U1194A clamp meter

- Each handheld includes:
- Certificate of calibration
  - Quick start guide
  - K-type thermocouple (only for U1194A)
  - 1.5 V AAA alkaline battery
  - Soft carrying case
  - Test leads with 4-mm tips
  - Test report with cal



Built-in LED flashlight to illuminate test area



## Handle big currents – safely

### U1210 Series handheld clamp meters



#### Key features

- Large clamp opening of 52 mm or 2"
- High measurement capability of up to 1000 A for AC, DC or AC+DC
- CAT III 1000 V/CAT IV 600 V safety rating
- Includes full-featured DMM with resistance, capacitance, frequency and temperature functions
- High resolution measurements – measure current as low as 0.01 A

Bluetooth wireless connectivity (optional U1177A Infrared (IR)-to-Bluetooth Adapter required)



Capacitance/diode measurement  
Temperature and audible continuity functions  
High measurement capability of up to 1000 A for AC, DC or AC+DC

Peak hold function for in-rush current testing



#### Key specifications

DCV accuracy	0.50%
Reading speed	7 readings/s
Measurements	DCV, ACV, DCI, ACI, 2-wire resistance, capacitance, temperature, frequency, diode test, continuity
Type of connectivity	IR-USB and Bluetooth

Technical datasheet:  
Literature number 5990-5083EN

#### Ordering information

U1211A clamp meter  
U1212A clamp meter  
U1213A clamp meter

Each clamp meter is shipped with::

- Test leads with 4-mm tips
- Soft carrying case
- Standard alkaline 9 V battery
- Quick start guide
- Certificate of calibration

## Robust and feature-packed

### U1230 Series handheld digital multimeters



#### Key features

- Built-in LED flashlight to illuminate test area
- Flashing backlight as additional visual alert during continuity tests in noisy areas
- Vsense performs non-contact voltage detection
- Data logging capability (stores up to 10 readings)
- IR-to-USB connectivity to transfer data to PC for record

Bluetooth wireless connectivity (optional U1177A Infrared (IR)-to-Bluetooth Adapter required)



#### Key specifications

DCV accuracy	0.5%+2
Reading speed	5 readings/s
Measurement functions	DCV, ACV, ACI, DCI, diode test, capacitance, resistance, temperature*, frequency, continuity test *Applies to U1233A only
Type of connectivity	IR-USB and Bluetooth

Technical datasheet:  
Literature number 5990-7550EN

#### Ordering information

U1231A digital multimeter  
U1232A digital multimeter  
U1233A digital multimeter

Each handheld comes with:

- Quick start guide
- Certificate of calibration
- U1167A 4 mm tips probes test leads
- 4 x 1.5 V batteries

## Check more, fix more, spend less

### U1240 Series handheld multimeters



#### Key features

- True RMS AC measurement
- Advanced functions – capacitance, temperature, MINMAX recording
- Manual data logging (U1242B only)
- Built-in switch counter, harmonic ratio (U1242B only), dual/differential temperature capabilities (U1242B only)
- CAT III 1000 V and CAT IV 600 V safety protection

Bluetooth wireless connectivity (optional U1177A Infrared (IR)-to-Bluetooth Adapter required)



#### Key specifications

DCV accuracy	0.09%
Reading speed	7 readings/s
Measurement functions	DCV, ACV, DCI, ACI, 2-wire resistance, frequency, capacitance, temperature, diode, continuity tests
Type of connectivity	IR-USB and Bluetooth

#### Ordering information

U1241B digital multimeter

U1242B digital multimeter

Each handheld comes with:

- Four 1.5 V AAA alkaline batteries
- Certificate of calibration
- Test probe leads (4-mm tips)
- Quick start guide
- Free test data (Option UK6)

Technical datasheet:

Literature number 5989-7040EN

## Be well equipped from the start

### U1250 Series handheld multimeters



#### Key features

- High contrast ratio of 2000:1 and wide viewing angle of 160°\*
- Built-in square-wave generator and frequency counter
- Includes all essential accessories for electronics troubleshooting
- Smoothing function to stabilize erratic readings\*
- Data logging to instrument and PC \*with U1253B

Bluetooth wireless connectivity (optional U1177A Infrared (IR)-to-Bluetooth Adapter required)



#### Key specifications

DCV accuracy	0.25%
Speed	100 readings/s
Measurement functions	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency, capacitance, temperature, diode, continuity tests
Type of connectivity	IR-USB and Bluetooth

#### Ordering information

U1251B digital multimeter

U1252B digital multimeter

U1253B digital multimeter

Each U1251B/U1252B includes:

- Four 1.5 V AAA alkaline batteries
- Certificate of calibration
- Test probe leads (4-mm tips)
- Quick start guide
- Free test data (Option UK6)

Each U1251B/U1252B includes:

- Four 1.5 V AAA alkaline batteries
- Certificate of calibration
- Test probe leads (4-mm tips)
- Quick start guide
- Free test data (Option UK6)

Technical datasheet:

Literature number 5989-5509EN



Best Value Portable Test Equipment, 2006



A testament to innovation and credibility, 2006



General-purpose instruments category, 2009



Category Winner, EC&M Product of the Year competition, 2009



## Shaped to fit, tailored to perform, built to last

### U1270 Series handheld digital multimeters



#### Key features

- OLED display with 2000:1 contrast ratio and 160 degree viewing angle\*
- Measure up to 1000 V AC/DC and 10 A (20 A for 30 s)
- Down to  $-40^{\circ}\text{C}$  operating temperature\*
- Water and dust resistance (IP 54)
- CAT III 1000 V / CAT IV 600 V

\*with U1273AX

Bluetooth wireless connectivity (optional U1177A Infrared (IR)-to-Bluetooth Adapter required)

#### Key specifications

DCV accuracy	0.05%
Speed	7 readings/s
Measurement functions	DCV, DCI, ACV, ACI, 2-wire resistance, frequency, capacitance, continuity, diode test
Type of connectivity	IR-USB and Bluetooth

#### Ordering information

U1271A digital multimeter  
U1272A digital multimeter  
U1273A digital multimeter  
U1273AX digital multimeter

Each handheld comes with:

- Standard test leads
- Test probes with 4-mm tips
- K-type thermocouple and adapter
- 4 x AAA alkaline batteries (for U1271A, U1272A, U1273A)
- 4 x AAA lithium batteries (for U1273AX)
- Certificate of calibration
- UK 6 (test report)
- Quick start guide

Technical datasheet:  
Literature number 5990-6425EN



Front panel



Back panel



## Calibrate and measure with just one tool

### U1401B handheld multi-function calibrator/meter



#### Key features

- Dual display with bright LCD backlight
- Simultaneous source and measure
- Bipolar voltage and current, square-wave, auto scan and ramp outputs
- Full-span DMM capability, including temperature and frequency measurements
- Data logging to PC with optional



#### Key specifications

DCV accuracy	0.003%
Reading speed	3 readings/s
Measurement	DCV, ACV, DCI, ACI, 2-wire resistance, temperature, frequency, diode test, continuity, pulse width, duty cycle
Type of connectivity	IR-USB

Technical datasheet:

Literature number 5990-3459EN

#### Ordering information

U1401B multi-function calibrator/meter

Each U1401B is shipped with:

- Calibrator/meter standard test
- Lead kit
- Yellow test lead for mA simulation
- Protective holster
- Rechargeable battery pack
- AC power adapter and cord (according to country)
- Quick start guide
- Certificate of calibration
- Soft carrying case is included for U1401A



A bench that fits into your bag

U2741A 5½ digit USB modular multimeter



Key features

- Up to 300 VDC with 5½ digit resolution
- Wide measurement ranges: 100 mVDC to 300 VDC, 10 mA to 2 A
- Compatibility with high-speed USB 2.0, USBTMC-USB488 standard
- Standalone and modular capabilities



Key specifications

DCV accuracy	0.02%
Reading speed - DCV	100 readings/s
Measurement	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency, temperature, diode, continuity tests
Type of connectivity	USB 2.0

Technical datasheet:  
Literature number 5991-0042EN

Ordering information

U2741A digital multimeter

- Each U2741A includes:
- 12 V, 2A AC/DC power adapter
  - Power cord
  - Standard test lead
  - USB standard-A to mini-B interface cable
  - L-mount kit (used with modular product chassis)
  - Keysight USB modular products quick start guide
  - Keysight Measurement Manager quick reference card
  - Certificate of calibration
  - Keysight USB modular products reference CD-ROM
  - Keysight automation-ready CD-ROM (contains the Keysight IO Libraries Suite)

## Challenge the boundaries of test

M9181A/M9182A/M9183A PXI 6½ digit multimeters



Model	Description
M9181A	PXI digital multimeter, 6½ digit, basic features
M9182A	PXI-H digital multimeter, 6½ digit, high performance
M9183A	PXI-H digital multimeter, 6½ digit, enhanced performance



### Comparison of Keysight PXI DMM models

	M9181A	M9182A	M9183A
Resolution		6½ digits	
Maximum reading rate @ 4½ digits	150 readings/s	4,500 readings/s	15,000 readings/s
Maximum transactional speed (single reading interval time)	6.7 ms	222 µs	66 µs
Measurements and functions	DCV, DCI, True RMS ACV and ACI, 2- and 4-wire resistance	All M9181A measurements, plus frequency/period, temperature, and capacitance	All M9182A measurements plus duty cycle, counter/totalizer, DC source, and extended measurement ranges
Basic 1 year DCV accuracy	0.009%	0.004%	0.004%
Floating isolation (CAT II)	Up to 240 V	Up to 300 V	Up to 300 V
Triggering	Immediate	Immediate, analog level, programmable pre/post triggering, PXI trigger bus	
Reading storage	none	Circular buffer, 80 readings	
Connector capability	cPCI, PXI-1	cPCI, PXI-H, PXI-1	
<b>Software</b>			
Drivers	IVI-C, IVI-COM, LabVIEW, MATLAB		
Supported software development environments	Visual Studio® (VB.NET, C#, C/C++), VEE, LabVIEW, LabWindows/CVI, MATLAB		
Included GUI	Soft front panel		
Application code examples	C/C++, Visual Basic		

M9181A Technical datasheet and flyer:  
**Literature number 5990-9035EN (DS)**  
**Literature number 5990-9024EN (FL)**

M9182A and M9183A Technical datasheet and flyer:  
**Literature number 5990-7580EN (DS)**  
**Literature number 5990-6550EN (FL)**

Ordering number	Description	Handheld clamp meters	Handheld DMMs						Bench DMMs								Modular DMM	Handheld calibrator/meter
		U1210 Series	U1190 Series	U1230 Series	U1240 Series	U1250 Series	U1270 Series	U3401A	U3402A	U3606A/B	34401A	34410A	34411A	34420A	34450A	34460A/61A	34465A/70A	3458A

### Kits/rack mounts

[illegible]

### Probes/leads/clamps/bocks/shunts/connectors

[illegible]

Ordering number	Description	Handheld clamp meters	Handheld DMMs					Bench DMMs							Modular DMM	PXI modular DMMs	Handheld calibrator/meter	
		U1210 Series	U1190 Series	U1230 Series	U1240 Series	U1250 Series	U1270 Series	U3401A/02A	U3606A/06B	34401A	34410A	34411A	34420A	34450A	34460A/61A	34465A/70A	3458A	U2741A

### Probes/adapters/leads for temperature measurement

[illegible]

**Carry case/ hanging kit/brackets**

[illegible]

**Power/cables/interface card**

[illegible]

## Linking up your instruments to the PC

Keysight GPIB and Instrument Control Products helps connect your instruments to PC easily, reliably and affordably. From legendary GPIB cables to the one-box connectivity gateway, see how each provides seamless integration of your instrument no matter where they are placed in your system.

[www.keysight.com/find/gpib](http://www.keysight.com/find/gpib)



### BenchVue Software

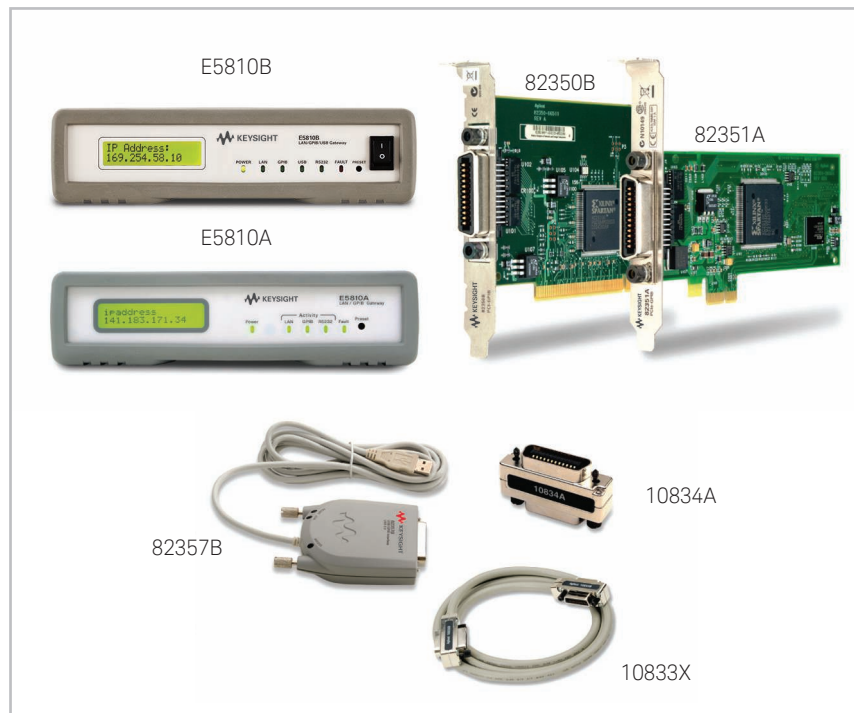
Data capture simplified.  
Click. Capture. Done.

BenchVue software for the PC makes it simple to connect, control, capture and view Keysight's DMMs simultaneously with other Keysight bench instruments and with no additional programming. BenchVue is an all-in-one application that enables you to:

- Visualize multiple measurements simultaneously
- Easily log data, screen shots and system state
- Recall past state of your bench to replicate results
- Export measurement data in desired format fast
- Quickly access manuals, drivers, FAQs and videos
- Monitor and control bench from mobile devices

The Digital Multimeter App within BenchVue enables control of digital multimeters to visualize measurements, perform data logging<sup>1</sup> and annotate captured data (included in model BV0000A). Upgrading to the Pro version (model #BV0001A) provides histograms, digitizer capability and unrestricted data logging with limit checking and alerts.

1. One hour limit in no cost version.



See your measurements across instruments in one place to quickly correlate measurement activities and obtain actionable insights.

Download BenchVue software at no cost today

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[www.lxistandard.org](http://www.lxistandard.org)

LAN eXtensions for Instruments puts the power of Ethernet and the Web inside your test systems. Keysight is a founding member of the LXI consortium.

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