



# Digital Multimeter

Selection guide

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# Index

Description	Digits of resolution	Measurement speed (reading/s at 4½ digits)	Basic 1-yr DCV accuracy	Basic measurements	Connectivity & software	Page:
<b>U3606B</b>						
 <p>5.5-digit DMM with built-in 30 W power supply Halves bench/ rack space need for two instruments</p>	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/OCP, auto scan/ramp and square wave generator	USB 2.0, GPIB	7
<b>34450A</b>						
 <p>5.5-digit bench digital multimeter OLED dual display</p>	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)	9
<b>34460A/34461A</b>						
 <p>Bench/System DMM Graphical color dual-line display with histogram and trend charts</p>	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)	11
<b>34465A</b>						
 <p>Bench/System DMM Includes 34461A features plus data logging, digitizing and auto calibration</p>	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)	13
<b>34470A</b>						
 <p>Bench/System DMM Includes 34461A features plus data logging, digitizing and auto calibration</p>	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)	13
<b>34420A</b>						
 <p>Nanovolt/μΩ meter Very accurate, low-level measurements</p>	7½	250	0.0030%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity test, capacitance, temperature	GPIB, RS-232, Intuilink software	15

Description	Digits of resolution	Measurement speed (reading/s at 4½ digits)	Basic 1-yr DCV accuracy	Basic measurements	Connectivity & software	Page:
<b>3458A</b>						
 <p>Bench/System DMM The fastest, most flexible and most accurate multimeter by Keysight. Ideal multimeter for demanding applications</p>	8½	100000 (@ 4½ digits)	0.0008% (0.0004% optional)	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, and temperature	GPIB	17
<b>U1177A/ U1117A</b>						
 <p>Infrared (IR)-to-Bluetooth Adapter Enables <i>Bluetooth</i> connection to compatible Keysight handhelds</p>	N/A	N/A	N/A	N/A	Keysight Mobile Meter Keysight Mobile Logger	18
<b>U1190 Series</b>						
 <p>Handheld DMM Illuminate test area and measure in safer manner</p>	3½	3	0.5%	DCV, ACV, DCI, ACI, 2- and 4-wire resistance, frequency, period, continuity, diode, capacitance, temperature	N/A	19
<b>U1210 Series</b>						
 <p>Handheld clamp meter For convenient high current measurements</p>	3½	7	0.5%	DCV, ACV, DCI, ACI, 2-wire resistance, frequency, continuity, diode test, capacitance, temperature	IR-USB, <i>Bluetooth</i>	21
<b>U1230 Series</b>						
 <p>Handheld DMM Retool your expectations with the Keysight U1230 Series handheld DMM</p>	3½	5	0.5%	DCV, ACV, DCI, ACI, resistance, frequency, continuity, diode test, capacitance, temperature	IR-USB, <i>Bluetooth</i>	23
<b>U1240B Series</b>						
 <p>Handheld DMM Feature-rich and robust DMMs</p>	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, <i>Bluetooth</i>	25

Description	Digits of resolution	Measurement speed (reading/s at 4½ digits)	Basic 1-yr DCV accuracy	Basic measurements	Connectivity & software	Page:
<b>U1240C Series</b>						
 Handheld DMM Perform test confidently and efficiently	4½	5	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, <i>Bluetooth</i>	27
<b>U1250 Series</b>						
 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, <i>Bluetooth</i>	29
<b>U1270 Series</b>						
 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, <i>Bluetooth</i>	31
<b>U1280 Series</b>						
 Handheld DMM Trustworthy measurements in the palm of your hand	4½	5	0.025%	DCV, DCI, ACV, ACI, 2-wire resistance, frequency, continuity, diode test, dB, capacitance, temperature, 4-20 mA % scale	IR-USB, <i>Bluetooth</i>	34
<b>U2741A</b>						
 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	36

Description	Digits of resolution	Measurement speed (reading/s at 4½ digits)	Basic 1-yr DCV accuracy	Basic measurements	Connectivity & software	Page:
<b>M9181A</b>						
 <p>PXI DMM - basic features. Best for functional test when there are multiple tests with range or function changes</p>	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	38
<b>M9182A/M9183A</b>						
 <p>PXI DMM - enhanced performance models. Best for functional test when there are multiple tests with range or function changes</p>	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	38
<b>Accessories compatibility list</b>						39-42
<b>BenchVue Software</b>						43

# Two instruments in one

## U3606B multimeter DC power supply

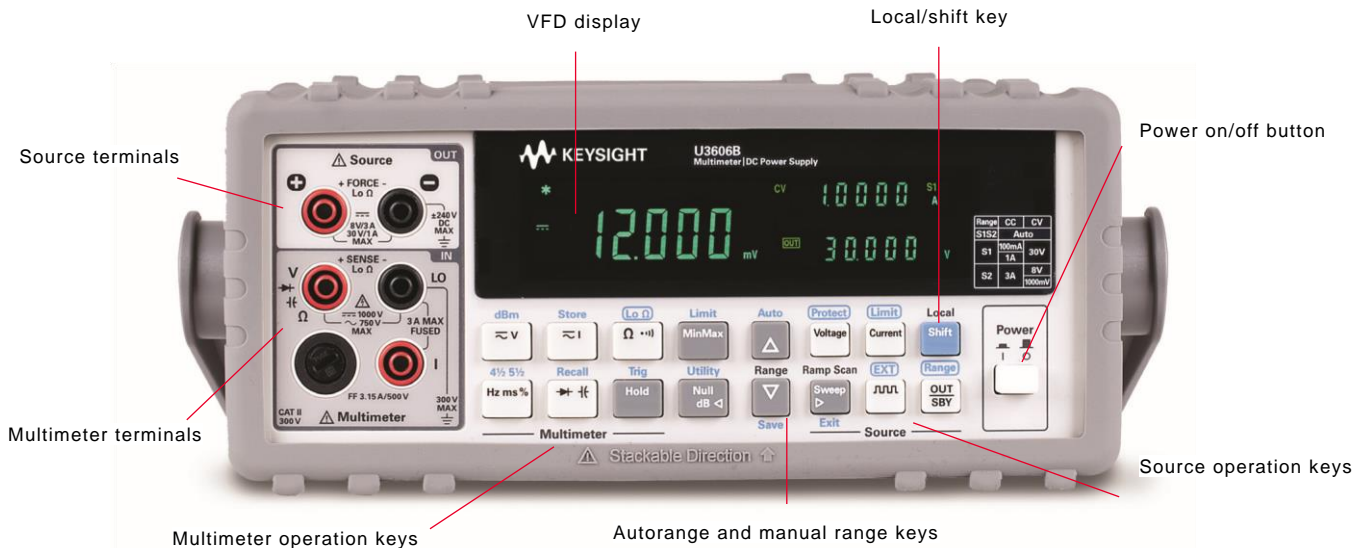
### Key features

#### Full-featured DMM

- 8 built-in math functions
- 120,000 counts resolution
- 4-wire wire mΩ measurement with 0.001 mΩ 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

Description	
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	GPIB, USB 2.
Technical datasheet	Literature number <a href="#">5991-2849EN</a>

## Ordering information

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

Each unit includes:

- 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 measurement 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

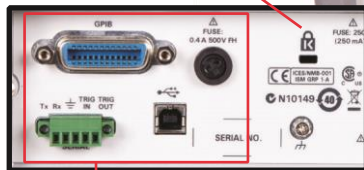
5.5 digit OLED dual display allows clear and quick view of measurements



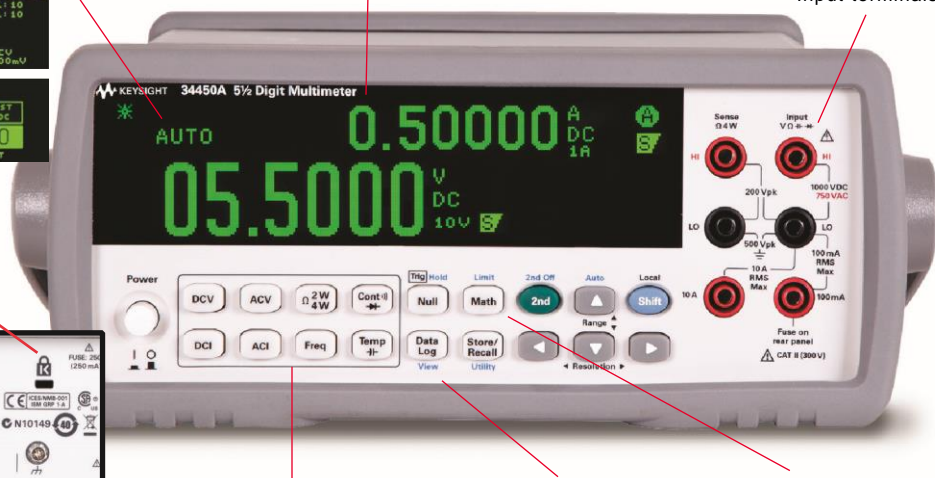
Fast 190 readings/sec and 0.015% DCV accuracy to help you achieve throughput breakthrough

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

Description	
DCV accuracy	0.015%
Reading speed	190 readings/second
Measurement functions	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance, frequency, diode, continuity, capacitance, temperature
Type of connectivity	USB 2.0, Serial
Technical datasheet	Literature number <a href="#">5991-1133EN</a>

## Ordering information

### 34450A 5½ digit dual display digital multimeter

Each 34450A includes:

- Each unit 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

# 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)

Color, graphical display with built-in math and statistical views



11 Truevolt measurement functions

Familiar access to all measurements and set-up

10 A current measurement capability (34461A only)



I/O: USB, LAN/LXI Core, GPIB (optional)

## Key specifications

Description	
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)
Technical datasheet	Literature number <a href="#">5991-1983EN</a>

## Ordering information

**34460A 6½ digit, basic Truevolt DMM**

**34461A 6½ digit, 34401A replacement, Truevolt DMM**

Upgradable 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) Technical datasheet:

# 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  $\mu$ A 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

Description	
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,
Type of connectivity	DC ratio
Technical datasheet	Literature number <a href="#">5991-1983EN</a>

## Ordering information

**34465A 6½ digit, performance Truevolt DMM (34410A/11A replacement) 34461A 6½ digit, 34401A replacement, Truevolt DMM**

**34470A 7½ digit, performance Truevolt DMM**

Upgradable options:

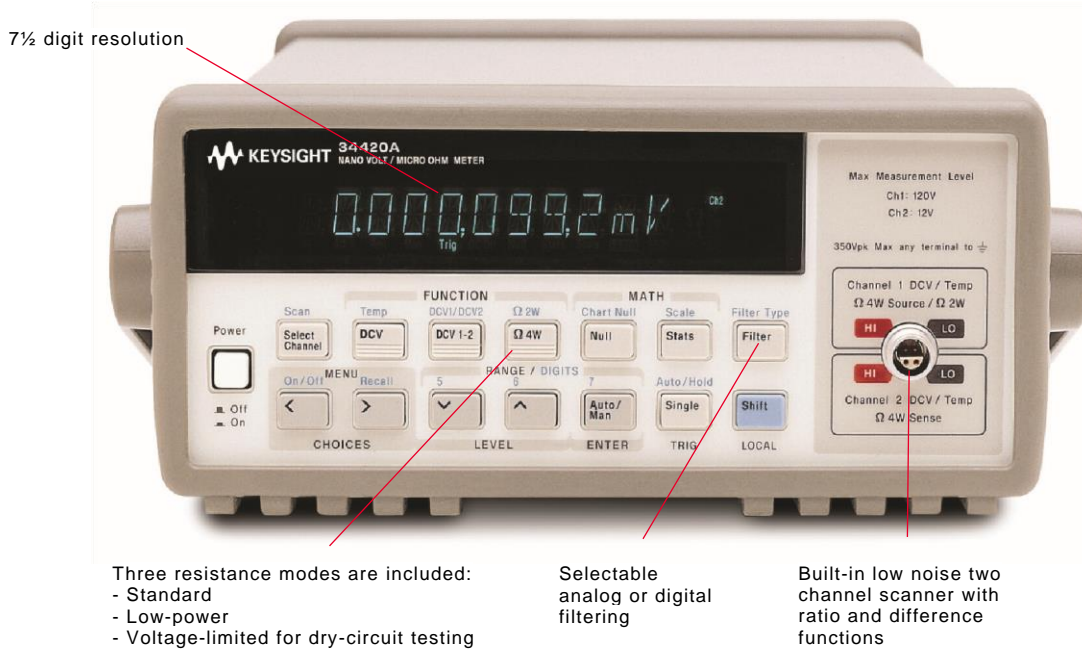
- 3446GPBU – GPIB user installable interface module
- 3446SECU – Enable NISPOM and file security
- 3446DIGU - Enable digitizing and advanced triggering
- 3446MEMU - Enable 2 million readings of memory
- BenchVue software enabled

# Nanovolt performance at a micro-volt price

## 34420A 7½ digit multimeter

### Key features

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



7½ digit resolution

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

Description	
DCV accuracy	0.0030%
Reading speed – DCV	250 readings/s
Measurements	DCV, 2- and 4-wire resistance, temperature
Type of connectivity	GPIB, RS-232
Technical datasheet	Literature number <a href="#">5968-0161EN</a>

## 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



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

Guard terminal and switch for maximum common mode noise rejection

## Key specifications

### Description

DCV accuracy	0.0008% (Optional 0.0004%)
Reading speed – DCV	Up to 100,000 readings/second
Measurements	(41/2 digits)
Type of connectivity	DCV, ACV, DCI, ACI, 2-wire and 4-wire resistance,
Technical datasheet	Literature number <a href="#">5965-4971E</a>

## Ordering information

### 3458A multimeter

Each 3458A includes:

- Test lead set (34118B)
- Power cord

# Go further with Keysight handheld digital multimeters

## Keysight Remote Link Solution

The remote link is Keysight Technologies, Inc. next generation wireless connectivity. With the new U1117A Infrared (IR)-to-Bluetooth® adapter and U1115A remote logging display, you can safely measure, view and log test measurements with an extended range of up to 100 meters. You can now log and monitor data on more display

devices such as iOS / Android-based smart devices or on a Windows-based PC. By simply attaching the U1117A / U1117A IR-to-Bluetooth adapter to the IR port of a Keysight handheld meter, you'll get instant wireless Bluetooth connection setup.

### Key features

- Extended measurement distance of up to 100 meters
- View readings of up to four handheld meters simultaneously
- Compatible across all existing Keysight U1200 series handheld meters
- 60,000 points interval logging <sup>1</sup>
- Download logged data to a PC via Bluetooth connection <sup>1</sup>
- Micro USB external power port <sup>1</sup>
- Indoor and outdoor viewing modes <sup>1</sup>

1. U1115A



Keysight U1117A 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, DC $\mu$ A<sup>3</sup>, AC $\mu$ A<sup>3</sup>, Continuity and Diode test measurements
- CAT III 600 V / CAT IV 300 V overvoltage protection

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

Description	
DCV accuracy	0.5+3
Reading speed – DCV	3 readings/s
Measurements	DCV, ACV, DCI, ACI, resistance, capacitance, diode test, temperature,
Type of connectivity	frequency, continuity
Technical datasheet	Literature number <a href="#">5990-8646EN</a>

## Ordering information

**U1191A clamp meter**

**U1192A clamp meter**

**U1193A clamp meter**

**U1194A clamp meter**

Each handheld includes:

- Certificate of calibration
- K-type thermocouple (only for U1194A)
- 1.5 V AAA alkaline battery
- Soft carrying case
- Test leads with 4-mm tips

# 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 overvoltage protection
- 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



Large jaw opening of 2" to test thick current sources

Max or Min recording capability

Large LCD display with maximum reading of 4000 counts

Manual or auto ranging

## Key specifications

Description	
DCV accuracy	0.50%
Reading speed	7 readings/s
Measurements	DCV, ACV, DCI, ACI, 2-wire
Type of connectivity	resistance, capacitance,
Technical datasheet	Literature number <a href="#">5990-5083EN</a>

## 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
- 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)

Freezes and stores current measurement value

Low input impedance to eliminate ghost voltage measurement

Anti-slip rotary dial for easy measurement function selection

Flashing light and audible beep during presence of voltage<sup>1</sup>

Bar graph indication and frequency measurement path

Allows flexibility to change measurement range

Vsense performs non-contact voltage detection<sup>1</sup>

Ease viewing with display backlight or built-in flashlight

1. Only applicable for the U1233A model

EN-Genius NETWORK Product of the Year

Test & Measurement World BEST IN TEST 2012 FINALIST

The built-in flashlight as illustrated

## Key specifications

Description	
DCV accuracy	0.5%+2
Reading speed	5 readings/s
Measurements functions	DCV, ACV, ACI, DCI, diode test, capacitance, resistance,
Type of connectivity	temperature*, frequency,
Technical datasheet	Literature number <a href="#">5990-7550EN</a>

## Ordering information

**U1231A digital multimeter**

**U1232A digital multimeter**

**U1233A digital multimeter**

Each handheld comes with:

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



# Check more, fix more, spend less

## U1240B 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 overvoltage protection

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



## Key specifications

Description	
DCV accuracy	0.09%
Reading speed	7 readings/s
Measurements functions	DCV, ACV, DCI, ACI, 2-wire resistance, frequency, capacitance, temperature, diode, continuity tests
Type of connectivity	IR-USB and <i>Bluetooth</i>
Technical datasheet	Literature number <a href="#">5989-7040EN</a>

## 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)
- Free test data (Option UK6)

# Perform test confidently and efficiently over a longer period of time!

## U1240C Series handheld digital multimeters

### Key features

- 10,000-count dual display
- Up to 0.09% basic DCV accuracy
- Longer battery life up to 400 hours
- Certified to IP 67 for water and dust protection and tested to withstand a 3-meter (10-ft) drop
- Built-in flashlight
- (U1242C) Vsense for non-contact voltage detection, built-in harmonic ratio, low impedance mode, T1-T2 differential temperature

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

10,000-count display

Data logging capability

Harmonic ratio<sup>1</sup>

ZLOW (Low input impedance)<sup>1</sup>

Dust and water protection with IP 67 ratings



Vsense<sup>1</sup> red LED indicator for non-contact voltage detection

Easy viewing with display backlight or built-in flashlight

Broad range of measurement functions: voltage, current, frequency, capacitance, resistance, continuity, diode test and temperature

CAT IV 600 V and CAT III 1000 V over-voltage protection

T1 – T2 differential temperature<sup>1</sup> measurement

1. U1242C only

## Key specifications

Description	
DCV accuracy	0.09%
Reading speed	5 readings/s
Measurements functions	Voltage, current, frequency,
Type of connectivity	capacitance, resistance,
Technical datasheet	Literature number <a href="#">5992-0848EN</a>

## Ordering information

**U1241C digital multimeter**

**U1242C digital multimeter**

Each handheld comes with:

- Test leads (red and black)
- Infrared (IR)-to-USB cable
- Four 1.5 V AAA alkaline batteries
- Certificate of calibration

# 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)



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

OLED display with approximately 160° viewing angle, and high contrast ratio of 2000:1 for crystal-clear viewing<sup>1</sup>

50,000 count dual display with true-RMS reading capability



SHIFT key and one-stop function keys for easy access

20 MHz frequency counter<sup>2</sup>

Data logging to internal or external memory

Broad range of measurement functions, including temperature and capacitance

Programmable square-wave generator for stimulation of digital circuits<sup>2</sup>

Built-in battery charging for optimum capacity

CAT III 1000 V and CAT IV 60 overvoltage protection for assurance of your safety while you go about your tasks



1. U1253B only  
2. U1252B/ U1253B only

## Key specifications

Description	
DCV accuracy	0.25%
Reading speed	100 readings/s
Measurements functions	DCV, ACV, DCI, ACI, 2-wire
Type of connectivity	resistance, frequency, capacitance, temperature, diode, continuity tests
Technical datasheet	Literature number <a href="#">5989-5509EN</a>

## Ordering information

**U1251B digital multimeter**

**U1252B digital multimeter**

**U1253B digital multimeter**

Each U1251B includes:

- One 9V size alkaline battery
- Certificate of calibration
- Test probe leads (4-mm tips)
- Free test data (Option UK6)

Each U1252B/U1253B includes:

- One 9V size rechargeable Ni-MH battery
- Certificate of calibration
- Test probe leads (4-mm tips)
- Free test data (Option UK6)

# 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 <sup>1</sup>
- Measure up to 1000 V AC/DC and 10 A (20 A for 30 s)
- Down to -40 °C operating temperature <sup>1</sup>
- Water and dust resistance (IP 54)
- CAT III 1000 V / CAT IV 600 V overvoltage protection

1. With U1273AX

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



1. U1272A, U1273A and U1273AX only



## Key specifications

Description	
DCV accuracy	0.05%
speed	7 readings/s
Measurements functions	DCV, DCI, ACV,
Type of connectivity	ACI, 2-wire
Technical datasheet	Literature number <a href="#">5990-6425EN</a>

## Ordering information

**U1271A digital multimeter**

**U1272A digital multimeter**

**U1273A digital multimeter**

**U1273AX digital multimeter**

Each U1251B includes:

- 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)

# Trustworthy measurements in the palm of your hand!

## U1280 Series handheld digital multimeters

### Key features

- 60,000-count dual display
- Up to 0.025% basic DCV accuracy
- Longer battery life up to 800 hours
- Certified to IP 67 for water and dust protection and tested to withstand a 3-meter (10-ft) drop
- (U1282A only) Vsense for non-contact voltage detection, square wave output, low pass filter, frequency counter

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



1. U1282A only

## Key specifications

Description	
DCV accuracy	0.025%
speed	5 readings/s
Measurements functions	Voltage, current, frequency, capacitance, resistance, continuity, diode test and temperature
Type of connectivity	IR-USB and <i>Bluetooth</i>
Technical datasheet	Literature number <a href="#">5990-6425EN</a>

## Ordering information

**U1281A digital multimeter**

**U1282A digital multimeter**

Each handheld comes with:

- Test leads (red and black)
- Infrared (IR)-to-USB cable
- Four 1.5 V AA alkaline batteries
- Certificate of calibration

## A bench that fits into your bag

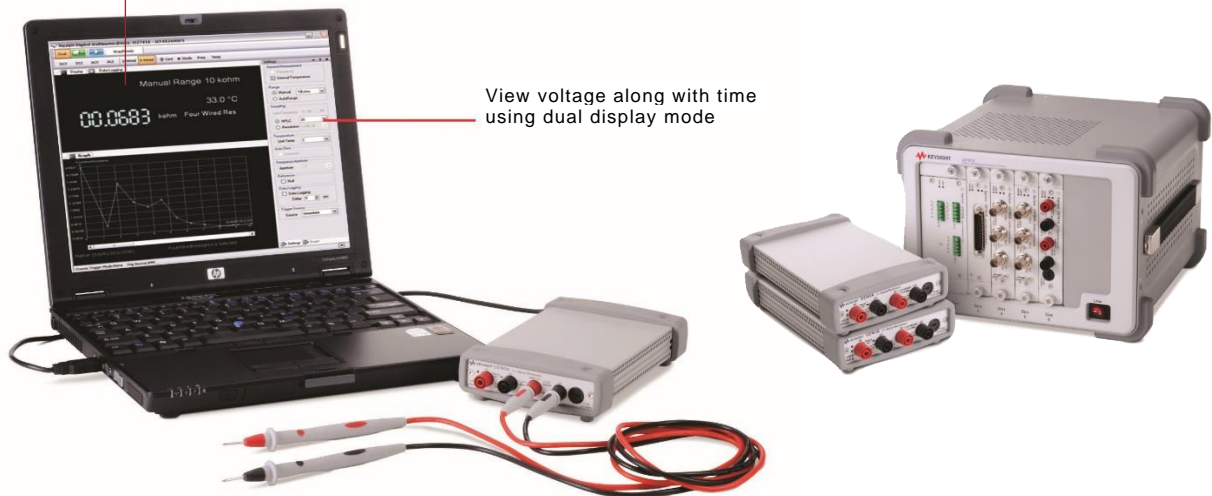
### U2741A 5½ digit USB modular multimeter

#### 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

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

Bundled software - Keysight Measurement Manager (AMM)



## Key specifications

Description	
DCV accuracy	0.02%
Reading speed - DCV	100 readings/s
Measurements	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 <a href="#">5991-0042EN</a>

## Ordering information

### U2741A digital multimeter

Each handheld comes with:

- 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 Measurement Manager quick reference card
- Certificate of calibration

## 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	

#### Software

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

Related literatures	Data sheet	Flyer
M9181A	5990-9035EN	5990-9024EN
M9182A and M9183A	5990-7580EN	5990-6550EN

# Accessories Compatibility Chart

Ordering number	Description	Handheld Clamp meters	Handheld DMMs							Bench DMMs					Modular DMM	
		U1210 Series	U1190 Series	U1230 series	U1240B Series	U1240C Series	U1250 Series	U1270 Series	U1280 Series	U3606A/B	34420A	34450A	34460A/61A	34465A/70A	3458A	U2741A
<b>Kits/rack mounts</b>																
34137A	Deluxe test lead set															■
34190A	Rackmount kit								■	■	■	■	■			
34191A	2U dual flange kit								■	■	■	■	■			
34194A	Dual lock link kit								■	■	■	■	■			
34307A	Thermocouple kit												■			
34308A	Thermistor kit											■	■			
E3600A-100	Test lead kit								■							
U1161A	Extended test lead kit	■	■	■	■	■	■	■								
U1168B	Standard test lead kit	■	■	■	■	■	■	■								
U1180A	Thermocouple adapter + lead kit (for U1242B only) (for U1252/53B only) (for U1272A/73/73AX)					■	■									
U8201A	Combo test lead kit								■							
U8202A	Electronic test lead kit								■							
Y1133A	Low-thermal external DMM scanning kit											■	■			
<b>Probes/leads/clamps/bocks/shunts/connectors</b>																
11059A	Kelvin prob set											■	■	■		
11060A	Surface mount device probe											■	■			
11062A	Kelvin clip set								■	■		■	■	■		
34103A	Low thermal shorting plug									■						
34104A	Low thermal input connector									■						
34131A	Transit case											■	■			
34133A	Precision electronic test leads								■			■	■			
34134A	DC coupled current probe											■	■			
34136A	High voltage probe								■			■	■			
34138A	Test lead set										■	■	■			■
34171B	Input terminal block											■	■			
34172B	Calibration short											■	■			
34330A	30 A current shunt								■			■	■	■		
E2308A	Thermistor temperature probe								■		■	■	■	■		■
U1115A	Remote logging display	■		■	■	■	■	■								

Ordering number	Description	Handheld Clamp meters								Handheld DMMs					Bench DMMs					Modular DMM
		U1210 Series	U1190 Series	U1230 series	U1240B Series	U1240C Series	U1250 Series	U1270 Series	U1280 Series	U3606A/B	34420A	34450A	34460A/61A	34465A/70A	3458A	U2741A				
U1117A	Infrared (IR)-to-Bluetooth adapter	■		■	■	■	■	■	■											
U1162A	Alligator clips	■	■	■	■		■	■												
U1163A	SMT grabbers	■	■	■	■		■	■												
U1164A	Fine-tip test probes	■	■	■	■		■	■												
U1169A	Test probe leads	■	■	■	■		■	■												
U1176A	Probe clip light	■	■	■	■	■	■	■	■											
U1177A	Infrared (IR)-to-Bluetooth adapter	■		■	■	■	■	■	■											
U1580A	DMM terminal test lead set	■	■	■	■	■	■	■	■											
U1583B	AC current clamp			■	■	■	■	■	■											
<b>Probes/adapters/leads for temperature measurement</b>																				
U1179A	IR connectivity/bracket				■															
U1181A	Immersion temperature probe (for U1212A/13A only) (for U1194A only) (for U1233A only)		■	■	■	■	■	■	■											
U1182A	Industrial surface temperature probe (for U1212A/13A only) (for U1194A only) (for U1233A only)		■	■	■	■	■	■	■											
U1183A	Air temperature probe (for U1212A/13A only) (for U1194A only) (for U1233A only)		■	■	■	■	■	■	■											
U1184A	Temperature probe adapter (for U1212A/13A only) (for U1194A only) (for U1233A only)		■	■	■	■	■	■	■											
U1185A	Thermocouple (J-type) and temperature probe adapter (for U1242A only) (for U1252A /53B only) (for U1272A/73A/73AX)				■	■	■	■	■											
U1186A	Thermocouple (K-Type) and temperature probe adapter (for U1212A/13A only) (for U1194A only) (for U1233A only)	■	■	■	■		■	■												
U1586B	Temperature module (for U1233A only)			■			■													
U5404A	Remote test probe for U1280 Series								■											
34131A	Transit case									■	■	■	■							
34161A	Accessory pouch										■									
34162A	Accessory pouch									■		■	■	■						



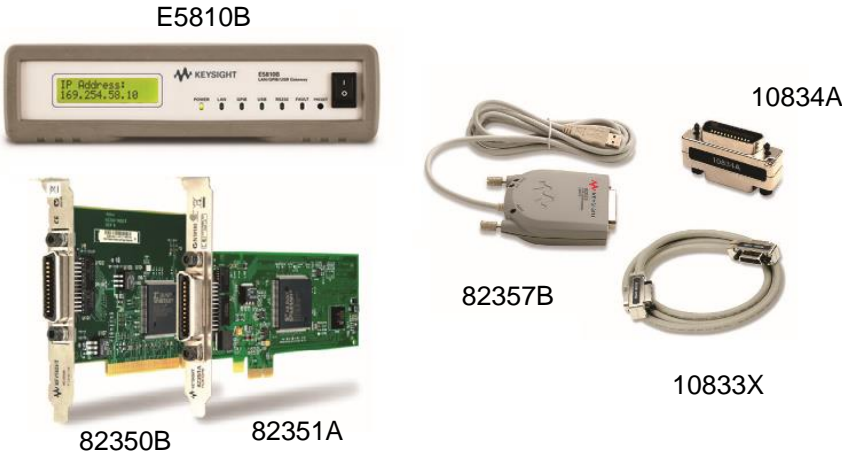
Ordering number	Description	Handheld Clamp meters	Handheld DMMs							Bench DMMs					Modular DMM	
			U1210 Series	U1190 Series	U1230 series	U1240B Series	U1240C Series	U1250 Series	U1270 Series	U1280 Series	U3606A/B	34420A	34450A	34460A/61A		34465A/70A
34398A	RS-232 cable, 9-pin (F) to 9-pin (F)															
82350A	Interface card, high-performance PCI to GPIB											■				
82357B	USB/GPIB interface											■				
U1171A	Magnetic hanging kit		■	■	■	■	■		■							
U1172A	Transit case (aluminum-clad)		■	■	■	■	■		■							
U1174A	Soft carrying case			■	■	■	■	■								
U1175A	Soft carrying case	■														
U1178A	Soft carrying case		■													
U1594A	Hard carrying case								■							
U1595A	Rugged carrying case	■	■	■	■	■	■	■	■							
10833A/B/C/D/F/G	GPIB cable											■				
34102A	Low thermal input cable										■					
U1170A	Battery charger adapter (for U1250/52/53B only)							■								
U1173A	IR-to-USB cable	■		■	■		■	■								

# 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.

## For more information

For more information about GPIB cables, go to [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.

The Digital Multimeter app within BenchVue enables control of digital multimeters to visualize measurements, perform data logging and annotate captured data (included in model BV0000A). Upgrading to the Pro version (model #B0001A) provides histograms, digitizer capability and unrestricted data logging with limit checking and alerts.

Download BenchVue software at no cost today. [www.keysight.com/find/benchvue](http://www.keysight.com/find/benchvue)



# Keysight handheld meter logger software

Perform measurements with U1210 Series, U1230 Series, U1240B Series<sup>1</sup>, U1240C Series, U1250 Series, U1270 Series, U1280 Series and U1450A/U1460A<sup>2</sup> using Windows-based PC.

- Connect up to 10 handheld meters - 5x IR-to-*Bluetooth*
- Adapter (U1177A, U1117A) and 5x IR-USB cable (U1173B)
- Meter view (live measurements) and logger view (graph with zoom and pan) mode
- Manage multi-session data logging within the software and explore the data to other software (Microsoft Excel)

Keysight handheld meter logger software for PC can be downloaded from:

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

## 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)

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<sup>1</sup> For the U1240B series, you also need to purchase the U1179A IR connectivity bracket to enable IR connectivity.

<sup>2</sup> Only allows one connection at a time

For more information on Keysight Technologies' products, applications, or services, please visit: [www.keysight.com](http://www.keysight.com)



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