Agilent Handheld Test Tools

— *Retool Your Expectations*

For more than 70 years, Agilent has been creating innovative measurement solutions. In recent years, we've been applying our tradition of innovation to handheld tools for electrical and electronics testing. Today, these tools are ready for the real-world conditions you face every day—and many offer unique functions such as:

- Clear readouts from a high contrast OLED display
- Continuity checks with audible and flashing alerts
- Low-light troubleshooting with a built-in flashlight

We're always looking for ways to simplify your day-to-day work. As we continue to develop innovative handhelds, you may start to feel like we do: It's a good time to retool your expectations.

Electrical, Industrial, Installation, Troubleshooting and Repair
DIGITAL MULTIMETERS

The U1230 Series handheld digital multimeters

Whether it's dark, noisy or even dangerous, the U1230 Series handheld digital multimeters keep you equipped with features that anticipate worst-case scenarios. The ergonomic shaped handheld allows you to single-handedly illuminate the test area with a built-in flashlight while making measurements. You can select measurement function using the easily accessible rotary dial. Vsense performs non-contact voltage detection while continuity detection is made easy with the audible beeper alert and flashing backlight display. With the U1230 Series, you work better in the conditions you are in.

Features
- Built-in LED torchlight to illuminate test area
- Flashing backlight as additional visual alert during continuity tests in noisy areas
- Vsense to perform non-contact voltage detection (only in U1233A)
- Data logging capability (stores up to 10 readings)
- IR-to-USB connectivity to transfer data to PC for record

The Agilent U1240 Series digital multimeters

Installation and maintenance of machinery, electrical systems and more often require numerous quick checks and fixes, sometimes under hazardous conditions. Whether you need to quickly inspect power supplies for harmonics, detect glitches in switch systems or monitor differential temperature, the U1240 Series of handheld digital multimeters (DMMs) is up to the task. With all you need in one portable instrument, you can travel light and finish the day's work with ease. Plus, you'll be glad to know it's easy to own one, even with the DMM's rich capabilities.

Features
- Low micro-amp and high Mega-ohm ranges
- Switch/Relay counter for glitch detection
- Harmonic ratio measurement in AC supplies
- Dual and differential temperature measurements
- Data logging to instrument on the go
- Includes additional 4-mm tip probes and Certification of Calibration

Agilent Technologies

The Agilent U1250 Series digital multimeters

The process of isolating faults is always unpredictable—so it's good to be equipped with a versatile DMM that simplifies analysis, accelerates glitch detection and makes it easier to probe hard-to-reach points. Optimize electronics troubleshooting with the accuracy, capabilities, and accessories you need to get started in no time.

Features

- High contrast ratio of 2000:1 and wide viewing angle of 160° (for U1253B)
- 50,000 counts high resolution and up to 0.025% low error rate
- Built-in square-wave generator and frequency counter
- Includes additional 4-mm tip probes and Certification of Calibration
- Data logging to instrument and PC

Imagine razor-sharp readings with the U1253B OLED handheld DMM

A testament to innovation and credibility, 2006

Best Value Portable Test Equipment, 2006

General-purpose instruments category, 2009

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

The U1270 Series handheld digital multimeters

Water and dust resistant. Grip-friendly and feature-packed. Designed especially to fulfill the needs of industrial handheld users today, Agilent has reinvented the industrial handheld DMM to provide more essential features in a single tool that is easy and fast to operate. Better yet, the U1273A now comes with an OLED display to ensure that you get the right readings at the first glance.

Features

- OLED display for high brightness level and wider viewing angles[1]
- Visual alert and audible continuity indication in noisy environments
- IP-54 certified – water and dust resistant
- Low pass filter, low impedance mode[2], Smart Ω[2], PC connectivity
- AC + DC capability[2]
- Convenient fuse access through battery door
- Ergonomic shape for better grip

1. *Exclusive to U1273A*
2. *Exclusive to U1272A and U1273A*

The Agilent U1190 Series handheld clamp meters

Agilent's U1190 series clamp meters are packed with a wealth of features to help you work more efficiently and more safely. Housed in robust cases, each model comes with an innovative wire separator that helps you isolate and measure individual wires in a bundle. The built-in LED flashlight illuminates your test area and Vsense performs non-contact voltage detection. The clamp meters are also CAT III 600 V and CAT IV 300 V certified to cover wider measurement categories.

Features

- Unique wire separator to separate wires in a bundle
- Vsense[1] performs non-contact voltage detection
- Built-in LED flashlight[1] to illuminate test area
- Visual (backlight alert) and audible continuity indication in noisy environments
- Current measurement up to 600 A[2]
- Digital multimeter (DMM) with Resistance, Capacitance[1], DCV, ACV, DCA[3], ACA, DCμA[3] and ACμA[3] measurement capabilities
- Continuity and Diode test measurements
- CAT III 600 V / CAT IV 300 V safety rating

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

The Agilent U1210 Series handheld clamp meters

Measurements of electrical distribution cables can be challenging and risky. For cables up to two inches in diameter, the **Agilent U1210 Series handheld clamp meters** enable high-current measurements without breaking the circuit. Unlike most clamp meters, they also include DMM capabilities—resistance, capacitance, frequency and temperature—to simplify troubleshooting during installation and maintenance. Best of all, they provide an extra layer of protection with CAT IV 600 V and CAT III 1000 V safety ratings.

Features

- Large clamp opening of 52 mm or 2 inches
- 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
- Peak hold capability

Electronics, Electrical, Installation and Maintenance
HANDHELD DIGITAL OSCILLOSCOPES

The Agilent U1600 Series digital oscilloscopes

A scope with a color waveform display. A DMM for basic measurements. A data logger to record DMM readings to a PC. All three capabilities are in one instrument—the U1600 Series of handheld digital oscilloscopes. Designed to address the portability needs of various installation and maintenance applications, these scopes enable clear waveform viewing, easy waveform analysis and quick isolation of signal glitches. With high-performance features loaded into one robust package, mobile troubleshooting is a breeze.

Features

- Built-in DMM and data logger
- Large 4.5-inch color display
- 200 MSa/s high sampling rate and deep memory
- Built-in Quick Help, available in multiple languages
- Data logging to instrument and PC
- Convenient data download to USB flash drive*

*   with Option 001

No. 1 Product of the Year as voted by readers—2006

The NEW Agilent U1610A/U1620A Digital Oscilloscope

The U1610A/U1620A is the world's first handheld oscilloscope with a VGA display. This 100/200 MHz handheld oscilloscope offers a floating measurement capability with two CAT III 600 V isolated channels. With up to 2 GSa/s sampling rate and 2 Mpts memory depth, it captures more waveforms from signals such as pulse width modulated circuit, in-rush, transient, and motor start up sequences. Engineered with a benchtop-like display and dual window zoom function, it easily identifies problem areas and zoom in for more detailed analysis. With these, you can now view signals in detail and detect glitches easily.

World's first VGA display handheld oscilloscope with two isolated channels

Features

- 100/200 MHz bandwidth with isolated channels
- 5.7-inch VGA TFT LCD display with 3 selectable viewing modes (indoor, outdoor and night vision)
- Up to 2 Mpts memory depth and 2 GSa/s sampling rate
- 10,000-count resolution on DMM display
- Channel-to-channel isolation with CAT III 600 V safety ratings
- Data logging capability and USB connectivity
- Convenient data/screen image download via USB thumb drive
- Up to 10 selectable languages on the User Interface (UI)

Electronics
HANDHELD CAPACITANCE AND LCR METERS

The Agilent U1700 Series capacitance/LCR meters

The U1730C Series handheld LCR meters now extends the measurement frequencies up to 100 kHz—a capability which is typically found only in benchtop meters. The meters offer auto identification, *Ai* capability which conveniently displays component type. You can also get measurements done faster and more efficiently with more detailed component analysis functions such as Z, ESR and DCR.

Features

- 20,000 counts resolution
- 0.2% basic accuracy
- Wide LCR ranges with 3 to 5 selectable test frequencies (Up to 100 kHz for U1733C)
- Auto identification *(Ai)* which automatically determines and displays component type and measurements
- Detailed component analysis with DCR, ESR, Z, D, Q, θ functions
- Battery life of 16 hours/AC-powered
- IR-to-USB connectivity for data logging to PC

Industrial Processes
HANDHELD MULTI-FUNCTION CALIBRATOR/METER

The Agilent U1401B multi-function calibrator/meter

More often than not, the calibration of process control parts requires simultaneous measurements with a DMM. Carry two tools in one—and calibrate while you measure—with the Agilent U1401B handheld multi-function calibrator/meter. Now you can travel light, whether you're doing calibration for validation, troubleshooting, or service and maintenance. Slip the robust U1401B in its sturdy carrying case and you're ready to go.

Features

- 50,000-count resolution on dual display
- Simultaneous source and measure capabilities
- Bipolar voltage and current, square-wave, auto scan and ramp outputs
- Full-span DMM measurement and recording functions
- Built-in charging capability

Product	Model number	Description
Digital multimeters	U1231A	Basic True RMS 6,000 count handheld DMM
	U1232A	True RMS 6,000 count handheld DMM
	U1233A	True RMS 6,000 count handheld DMM with non-contact voltage detector
	U1241B	True RMS 10,000 count handheld DMM
	U1242B	True RMS 10,000 count handheld DMM with data logging
	U1251B	50,000 count handheld DMM
	U1252B	50,000 count handheld DMM with frequency counter, logic output and data logging
	U1253B	50,000 count handheld DMM with OLED display
	U1271A	True RMS 30,000 count handheld DMM
	U1272A	True RMS 30,000 count handheld DMM with low impedance mode
	U1273A	True RMS 30,000 count handheld DMM with OLED display
Clamp meters	U1191A	Average responding 400 A handheld clamp meter
	U1192A	Average responding 400 A handheld clamp meter
	U1193A	True RMS 600 A handheld clamp meter
	U1194A	True RMS 600 A handheld clamp meter
	U1211A	True RMS 1,000 A handheld clamp meter
	U1212A	True RMS 1,000 A handheld clamp meter
	U1213A	True RMS 1,000 A handheld clamp meter
Oscilloscopes	U1602B	20 MHz handheld digital oscilloscope
	U1604B	40 MHz handheld digital oscilloscope
	U1610A	100 MHz handheld digital oscilloscope
	U1620A	200 MHz handheld digital oscilloscope
LCR meters	U1701B	11,000 count dual display handheld capacitance meter
	U1731C	20,000 count dual display handheld LCR meter, 100 Hz/120 Hz/1 kHz
	U1732C	20,000 count dual display handheld LCR meter, 100 Hz/120 Hz/1 kHz/10 kHz
	U1733C	20,000 count dual display handheld LCR meter, 100 Hz/120 Hz/1 kHz/10 kHz/100 kHz
Calibrator/meter	U1401B	Handheld multi-function calibrator/meter

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