

# Agilent Handheld Test Tools

High quality, reliable equipment for electronics, electrical and industrial process testing

Agilent Technologies is the world's premier measurement company and a technology leader in communications, electronics, life sciences and chemical analysis. Recognizing the increasing demand for tools that are portable, accurate and yet affordable, Agilent offers handheld instruments which include digital multimeters, oscilloscopes, clamp

meters, capacitance and LCR meters and multi-function calibrator/meter for installation and maintenance activities.

These award-winning handheld tools meet critical safety standards while providing a wealth of features and world-class accuracy.

Each handheld comes in vivid orange cases that provide greater visibility and serves to emphasize investment protection through feature sets that go beyond those of typical handhelds.



## Industrial – Installation, Troubleshooting and Repair DIGITAL MULTIMETERS

Shaped to fit, tailored to perform,  
built to last



\* U1272A only

### The NEW U1270 Series handheld digital multimeters

#### Key features:

- Visual (Backlight Alert) and audible continuity indication in noisy environments
- IP-54 certified – water and dust resistant
- Low pass filter, low impedance mode\*, Smart  $\Omega$ \*, PC connectivity
- AC + DC capability\*
- Convenient fuse access through battery door
- Ergonomic shape for better grip

Water and dust resistant. Grip-friendly and feature-packed. That's what you get with an Agilent U1270 series handheld DMM. 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.



**Agilent Technologies**

# Electronics, Electrical, Installation and Maintenance

## MORE HANDHELD DIGITAL MULTIMETERS AND CLAMP METERS



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

### Be well equipped from the start with 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 U1253A/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 U1253A/U1253B OLED handheld DMM



### Check more, fix more, spend less with 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



### Handle big currents – safely with Agilent U1210 Series handheld clamp meters

#### Key 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

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.

## Electronics, Electrical, Installation and Maintenance HANDHELD DIGITAL OSCILLOSCOPES



### Make high performance measurements on the go with 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

## Electronics HANDHELD CAPACITANCE AND LCR METERS



### Test passive components conveniently, affordably *and* reliably with the Agilent U1700 Series capacitance/LCR meters — extending the tradition of industry-leading benchtop units

Sharing a bench LCR meter is practical, but isn't always convenient. With Agilent's new line of handheld capacitance and LCR meters, you can perform quick, basic LCR measurements at your convenience. Better yet, our handheld models extend the tradition of our industry-leading benchtop units to a lower price point. Now, everyone on your team can be equipped for passive-component testing—on the bench or on the go—without the wait.

#### Features

- Up to 20,000 counts resolution with dual display
- Wide capacitance measurement up to 199.99 mF<sup>1</sup>
- Wide LCR range with up to 4 test frequencies<sup>2</sup>
- Auto-calculation of phase angle, D and Q factors<sup>2</sup>
- Compare mode with 25 High/Low limit settings<sup>1</sup>
- Relative and Tolerance modes

1. with U1701A/U1701B

2. with handheld LCR meters (phase angle calculation only with U1732A/U1732B)



Calibrate process control parts easily with using just one tool with the Agilent U1401A/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 U1401A/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 U1401A/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

Model number	Description
U1211A	True-rms 1000 A Handheld Clamp Meter
U1212A	True-rms 1000 A Handheld Clamp Meter
U1213A	True-rms 1000 A Handheld Clamp Meter
U1241A/U1241B	True-rms 10,000 Count Handheld DMM
U1242A/U1242B	True-rms 10,000 Count Handheld DMM with Datalogging
U1251A/U1251B	50,000 Count Handheld DMM
U1252A/U1252B	50,000 Count Handheld DMM with Freq Counter, Logic Output and Data Logging
U1253A/U1253B	50,000 Count Handheld DMM with OLED Display
U1253A-001	Includes soft carrying case, SMT grabbers and fine-tip test probes
U1271A	True-rms 30,000 count Handheld DMM
U1272A	True-rms 30,000 count Handheld DMM with low impedance mode
U1401A/U1401B	Handheld Multi-Function Calibrator or Meter
U1602A/U1602B	20 MHz Handheld Digital Oscilloscope
U1604A/U1604B	40 MHz Handheld Digital Oscilloscope
U1701A/U1701B	11,000 Count Dual Display Handheld Capacitance Meter
U1731A/U1731B	20,000 Count Dual Display Handheld LCR Meter, 120 Hz/1 kHz
U1732A/U1732B	20,000 Count Dual Display Handheld LCR Meter, 100 Hz/120 Hz/1 kHz/10 kHz

For more information on Agilent Technologies' products, applications or services, please contact your local Agilent office. The complete list is available at:

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