



# Agilent Handheld Digital Multimeters

## Retool Your Expectations



See how Agilent handhelds outperform Fluke models

### The U1270 Series - The industrial multimeter

- **Clear display readings** – The U1273A with an OLED display has high contrast ratio of 2000:1 and wide viewing angles up to 160°
- **Enhanced usability** – Low impedance mode to eliminate stray voltage from your measurements  
– Flashing backlight for continuity test in noisy and dark environments
- **Ergonomic shape** – Better grip when measuring on the go
- **PC-connectivity** – Up to 10,000 internal memory plus data logging via USB

**NEW**



### Agilent U1271A/72A/73A versus Fluke 87V

Model	Fluke 87V*	Agilent U1271A**	Agilent U1272A**	Agilent U1273A**	Benefits
Counts	20,000	30,000	30,000	30,000	Clear readings with U1273A's OLED display in poorly lit environments.
True-RMS	AC	AC	AC + DC	AC + DC	
Basic DCV accuracy	0.05%	0.05%	0.05%	0.05%	
Voltage	0.1 mV to 1,000 V	0.01 mV to 1,000 V	0.001 mV to 1,000 V	0.001 mV to 1,000 V	
Current	0.1 µA to 10 A	0.01 µA to 10 A	0.01 µA to 10 A	0.01 µA to 10 A	
Resistance	0.1 Ω to 50 MΩ	0.01 Ω to 100 MΩ	0.001 Ω to 300 MΩ	0.001 Ω to 300 MΩ	
Capacitance	0.01 nF to 9,999 µF	0.001 nF to 10 mF	0.001 nF to 10 mF	0.001 nF to 10 mF	
Frequency	0.01 Hz to 199.99 kHz	0.001 Hz to 999.99 kHz	0.001 Hz to 999.99 kHz	0.001 Hz to 999.99 kHz	
Temperature	K: -200 to 1,090 °C	K: -200 to 1,372 °C	K: -200 to 1,372 °C J: -210 to 1,200 °C	K: -200 to 1,372 °C J: -210 to 1,200 °C	
Continuity test	Beeper	Beeper + Flashing Backlight	Beeper + Flashing Backlight	Beeper + Symbol Alert	Performs continuity test in noisy and dark environments easily
PC interface	No	IR-USB	IR-USB	IR-USB	Data logging made easy
Low impedance mode	No	Yes	Yes	Yes	Get higher accuracy by removing stray voltage from the measurement
Manual and automated data logging	No	Manual: 100 points Interval: 200 points	Manual: 100 points Interval: 10,000 points	Manual: 100 points Interval: 10,000 points	
Backlight	Yes	Yes	Yes	Yes	
Battery	9 V	4 x AAA	4 x AAA	4 x AAA	
Accessories	Test leads, alligator clips, temperature probe	Standard leads, test probes with 4-mm tips, K-type thermocouple and adapter, 4 x AAA batteries, Certificate of Calibration, UK 6 (test report), Quick Start Guide	Standard leads, test probes with 4-mm tips, K-type thermocouple and adapter, 4 x AAA batteries, Certificate of Calibration, UK 6 (test report), Quick Start Guide	Standard leads, test probes with 4-mm tips, K-type thermocouple and adapter, 4 x AAA batteries, Certificate of Calibration, UK 6 (test report), Quick Start Guide	More accessories at no extra cost to help you kick-start measurements

\* Fluke 87V specifications were downloaded from [www.fluke.com](http://www.fluke.com) on April 15, 2011. \*\* Agilent U1271A, U1272A and U1273A Handheld Digital Multimeters Data Sheet, literature number: 5990-6425EN  
Product specifications and descriptions in this document are subject to change without notice.



### The U1230 Series handheld digital multimeter

- Comes with an easily activated built-in flashlight to illuminate test area
- Performs continuity detection with flashing backlight display and beeper alert
- Vsense performs non-contact voltage detection

### Agilent U1232A/33A versus Fluke 115/116/117

Model	Fluke 115*	Agilent U1232A**	Fluke 116/117*	Agilent U1233A**	Benefits
Voltage Range and Accuracy	600 mV to 600 V DCV: 0.5% + 2 digits ACV: 1% + 3 digits (45 Hz to 1 kHz)	600 mV to 600 V DCV: 0.5% + 2 digits ACV: 1% + 3 digits (45 Hz to 1 kHz)	600 mV to 600 V DCV: 0.5% + 2 digits ACV: 1% + 3 digits (45 Hz to 1 kHz)	600 mV to 600 V DCV: 0.5% + 2 digits ACV: 1% + 3 digits (45 Hz to 1 kHz)	
Selectable low impedance mode	Yes, AUTO-V ~ 3 kΩ	Yes, Z <sub>LOW</sub> ~ 3 kΩ	Yes, AUTO-V ~ 3 kΩ	Yes, Z <sub>LOW</sub> ~ 3 kΩ	
Current Range and Accuracy	6 A to 10 A DCI: 1% + 3 digits ACI: 1.5% + 3 digits (45 Hz to 500 Hz)	60 µA to 10 A DCI: 1% + 2 digits ACI: 1.5% + 3 digits (45 Hz to 500 Hz)	600 µA (F116) or 6 A to 10 A DCI: 1% + 2 digits ACI: 1.5% + 3 digits (45 Hz to 500 Hz)	60 µA to 10 A DCI: 1% + 2 digits ACI: 1.5% + 3 digits (45 Hz to 500 Hz)	
Temperature Range and Accuracy	No	No	K type: -40 to 4,000 °C 1% + 10 counts	K type: -40 to 1,372 °C 1% + 1 °C	
Continuity with Backlight Alert	No	Yes	No	Yes	Backlight Alert as additional visual alert in noisy environments
Non-contact voltage detector	No	No	Yes with VoltAlert (only in 117)	Yes with Vsense	Vsense performs safe non-contact voltage detection
Built-in flashlight	No	Yes	No	Yes	Allows test area to be illuminated without the need of a separate flashlight while selecting measurement functions
PC connectivity	No	IR-to-USB	No	IR-to-USB	Allows data transfer to PC for analysis

\* Fluke 115/6/7 specifications were downloaded from [www.fluke.com](http://www.fluke.com) on April 15, 2011. \*\* Agilent U1232A and U1233A Handheld Digital Multimeters Datasheet, literature number: 5990-7550EN  
Product specifications and descriptions in this document are subject to change without notice.



**Agilent Technologies**



## The U1240 Series - Ideal for installation and maintenance of machinery and electrical systems

- Low micro-amp and high Mega-ohm ranges
- Switch/Relay counter for glitch detection
- Harmonic Ratio measurement in AC supplies
- Data logging capability

### Agilent U1241B/42B versus Fluke 179

Model	Fluke 179*	Agilent U1241B	Agilent U1242B	Benefits
Counts	6,000	10,000	10,000	View your measurements better
Display	Single	Dual	Dual	View two measurements at once
True-RMS	AC	AC	AC	
Basic DCV accuracy	0.09%	0.09%	0.09%	
Voltage	0.1 mV to 1,000 V	0.01 mV to 1,000 V	0.01 mV to 1,000 V	
Current	0.01 mA to 10 A	0.1 $\mu$ A to 10 A	0.1 $\mu$ A to 10 A	Measure over broad ranges with low current and high resistance capabilities
Resistance	0.1 $\Omega$ to 50 M $\Omega$	0.1 $\Omega$ to 100 M $\Omega$	0.1 $\Omega$ to 100 M $\Omega$	
Capacitance	1 nF to 10 mF	0.1 nF to 10 mF	0.1 nF to 10 mF	
Frequency	0.01 Hz to 99.99 kHz	0.01 Hz to 200 kHz	0.01 Hz to 200 kHz	
Temperature & scan	K: -40 to 400 °C	K: -40 to 1,000 °C	J & K: -40 to 1,000 °C T1, T2, T1-T2	Get comprehensive dual and differential temperature measurements
Continuity with beeper	Yes	Yes	Yes	
Harmonic Ratio	No	No	Yes	
Switch counter	No	Yes	Yes	
Manual and automated data logging	No	No	Manual: 100 Interval: 200	Capture and log data over long periods easily
Backlight	Yes	Yes (2 intensities)	Yes (2 intensities)	
Battery	9 V	4 x AAA	4 x AAA	
Accessories	Test leads, temperature probe	Test leads with 4-mm tip probes, UK 6 (test report), Certificate of Calibration	Test leads with 4-mm tip probes, UK 6 (test report), Certificate of Calibration	

\* Fluke 179 specifications were downloaded from [www.fluke.com](http://www.fluke.com) on April 15, 2011.

\*\* Agilent U1241B and U1242B Handheld Digital Multimeters Data Sheet, literature number: 5989-7040EN  
Product specifications and descriptions in this document are subject to change without notice.



## The U1250 Series - Designed for electronics troubleshooting

- High contrast ratio of 2000:1 and wide viewing angle of 160°
- Built-in square-wave generator and frequency counter
- 50,000 counts high resolution and up to 0.025% low error rate

### Agilent U1252B/53B versus Fluke 287/289

Model	Fluke 287*	Fluke 289	Agilent U1252B	Agilent U1253B	Benefits
Counts	50,000	50,000	50,000	50,000	
Display	½ VGA with Trendplot	½ VGA with Trendplot	LCD	OLED	Extra clear readings with OLED display with 160° viewing angle and 2000:1 contrast ratio
True-RMS	AC + DC	AC + DC	AC + DC	AC + DC	
Basic DCV accuracy	0.025%	0.025%	0.025%	0.025%	
Voltage	0.001 mV to 1000 V	0.001 mV to 1000 V	0.001 mV to 1000 V	0.001 mV to 1000 V	
Current	0.01 $\mu$ A to 10 A	0.01 $\mu$ A to 10 A	0.01 $\mu$ A to 10 A	0.01 $\mu$ A to 10 A	
Resistance	0.001 $\Omega$ to 500 M $\Omega$	0.001 $\Omega$ to 500 M $\Omega$	0.01 $\Omega$ to 500 M $\Omega$	0.01 $\Omega$ to 500 M $\Omega$	
Capacitance	0.001 nF to 100 mF	0.001 nF to 100 mF	0.001 nF to 100 mF	0.001 nF to 100 mF	
Frequency	0.001 Hz to 1 MHz	0.001 Hz to 1 MHz	0.001 Hz to 20 MHz	0.001 Hz to 20 MHz	Saves costs on a separate frequency counter
Temperature	K: -200 to 1350 °C	K: -200 to 1,350 °C	J & K: -200 to 1,372 °C	J & K: -200 to 1,372 °C	
Square wave output	No	No	Yes	Yes	
PC interface	IR-USB	IR-USB	IR-USB	IR-USB	
Manual and automated data logging	Yes	Yes	Manual: 100 points Interval: 200 points	Manual: 100 points Interval: 1000 points	
Backlight	Yes	Yes	Yes	No backlight needed	Easier to use in poorly-lit environment
Battery	6 x AA	6 x AA	7.2 V rechargeable	7.2 V rechargeable	
Accessories	Test leads, alligator clips	Test leads, alligator clips, batteries, probe holder, registration card, Getting Started manual, CD-ROM	Test leads with 4-mm tip probes, alligator clips, battery charger, Certificate of Calibration, UK 6 (test report), Quick Start Guide	Test leads with 4-mm tip probes, alligator clips, battery charger, Certificate of Calibration, UK 6 (test report), Quick Start Guide	More accessories at no extra cost to help you kick-start measurements

\* Fluke 287 and 289 specifications were downloaded from [www.fluke.com](http://www.fluke.com) on April 15, 2011.

\*\* Agilent U1252B and U1253B Handheld Digital Multimeters Data Sheet, literature number: 5989-5509EN  
Product specifications and descriptions in this document are subject to change without notice.

