Keysight U1230 Series Handheld Digital Multimeters

Retool your expectations with the new Keysight Technologies, Inc. U1230 Series Handheld DMMs- the first to combine a built-in LED flashlight, both audible and visual alerts, and non-contact AC voltage detection in one handheld.

Whether it is dark, noisy or even dangerous, the U1230 Series handheld digital multimeters (HH DMMs) 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 selecting measurement functions using the rotary dial. For improved safety, Vsense performs non-contact voltage detection while continuity detection is made easy with the audible beeper alert and flashing backlight display alert.

Front panel

1. Freezes and stores current measurement value
2. Low input impedance to eliminate ghost voltage measurement
3. Anti-slip rotary dial for easy measurement function selection
4. Flashing light and audible beep during presence of voltage (only in U1233A)
5. Bar graph indication and frequency measurement path
6. Allows flexibility to change measurement range
7. Vsense performs non-contact voltage detection (only in U1233A)
8. Ease viewing with display backlight or built-in flashlight

Built-in flashlight as illustrated.

Designed to fulfill the needs of handheld users working in dark, noisy or dangerous environments, Keysight Technologies, Inc. has reinvented the handheld DMM to provide:

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

Recommended accessories

U1171A Magnetic hanging kit

U1173A IR-to-USB cable

U1168A Standard test lead kit

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		U1231A	U1232A	U1233A
Basic features				
Display resolution		6,000	6,000	6,000
Auto/manual ranging		Yes	Yes	Yes
Analog bar graph		Yes	Yes	Yes
Backlight		Yes	Yes	Yes
AC bandwidth		45 Hz to 1 kHz	45 Hz to 1 kHz	45 Hz to 1 kHz
True RMS		Yes	Yes	Yes
Measurements				
Voltage DC	Range	600 mV to 600 V	600 mV to 600 V	600 mV to 600 V
	Accuracy	0.5% + 2 cnts	0.5% + 2 cnts	0.5% + 2 cnts
Voltage AC	Range	600 mV to 600 V	600 mV to 600 V	600 mV to 600 V
	Accuracy	1.0% + 3 cnts	1.0% + 3 cnts	1.0% + 3 cnts
	Bandwidth	45 Hz to 1 kHz	45 Hz to 1 kHz	45 Hz to 1 kHz
Current DC	Range	N/A	60 µA to 10 A [1]	60 µA to 10 A [1]
	Accuracy	N/A	1.0% + 2 cnts	1.0% + 2 cnts
Current AC	Range	N/A	60 µA to 10 A [2]	60 µA to 10 A [2]
	Accuracy	N/A	1.5% + 3 cnts	1.5% + 3 cnts
	Bandwidth	N/A	45 Hz to 500 Hz	45 Hz to 500 Hz
Resistance	Range	600 Ω to 60 MΩ	600 Ω to 60 MΩ	600 Ω to 60 MΩ
	Accuracy	0.9% + 3 cnts	0.9% + 3 cnts	0.9% + 3 cnts
Frequency	Range	99.99 Hz to 99.99 kHz	99.99 Hz to 99.99 kHz	99.99 Hz to 99.99 kHz
	Accuracy	0.1% + 2 cnts	0.1% + 2 cnts	0.1% + 2 cnts
Capacitance	Range	1000 nF to 10 mF	1000 nF to 10 mF	1000 nF to 10 mF
	Accuracy	1.9% + 2 cnts	1.9% + 2 cnts	1.9% + 2 cnts
Temperature (K-type thermocouple)	Range	N/A	N/A	-40 °C to 1372 °C
	Accuracy	N/A	N/A	1% + 1 °C
Continuity with beeper		Yes	Yes	Yes
Diode test		Yes	Yes	Yes

	U1231A	U1232A	U1233A
Data management			
Min/Max recording	Yes	Yes	Yes
Display hold	Yes	Yes	Yes
Auto hold	Yes	Yes	Yes
Null	Yes	Yes	Yes
PC-Connectivity	IR-USB	IR-USB	IR-USB
Special features			
Built-in flashlight	Yes	Yes	Yes
Beep + backlight alert	Yes	Yes	Yes
Vsense for non-contact voltage detection	No	No	Yes
Z_{LOW}- low impedance mode	Yes	Yes	Yes
Safety and regulatory			
Over-voltage safety protection	CAT III 600 V	CAT III 600 V	CAT III 600 V
EN/IEC 610101-1:2001 compliance	Yes	Yes	Yes
CSA C22.2 No. 61010-1:2004 compliance	Yes	Yes	Yes
General			
Operating temperature	-10 °C to 55 °C, 0% to 80% RH	-10 °C to 55 °C, 0% to 80% RH	-10 °C to 55 °C, 0% to 80% RH
Battery (included)	4 x 1.5 V	4 x 1.5 V	4 x 1.5 V
Battery life	500 hours	500 hours	500 hours
Warranty	3 years	3 years	3 years
Dimensions (H x W x D)	169 mm × 86 mm × 52 mm	169 mm × 86 mm × 52 mm	169 mm × 86 mm × 52 mm

1. DC current range of 0.6 mA to 1 mA is not measureable on the U1232A and U1233A models.
2. AC current range of 0.6 mA to 300 mA is not measureable on the U1232A and U1233A models.
3. For temperature measurement on U1233A, the type-K thermocouple probe and adapter such as the U1186A (purchase separately) is required.
4. For auxillary temperature measurement on U1231A & U1232A, a temperature module such as the U1586B (purchase separately) is required.

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