

DIGITAL MULTIMETER

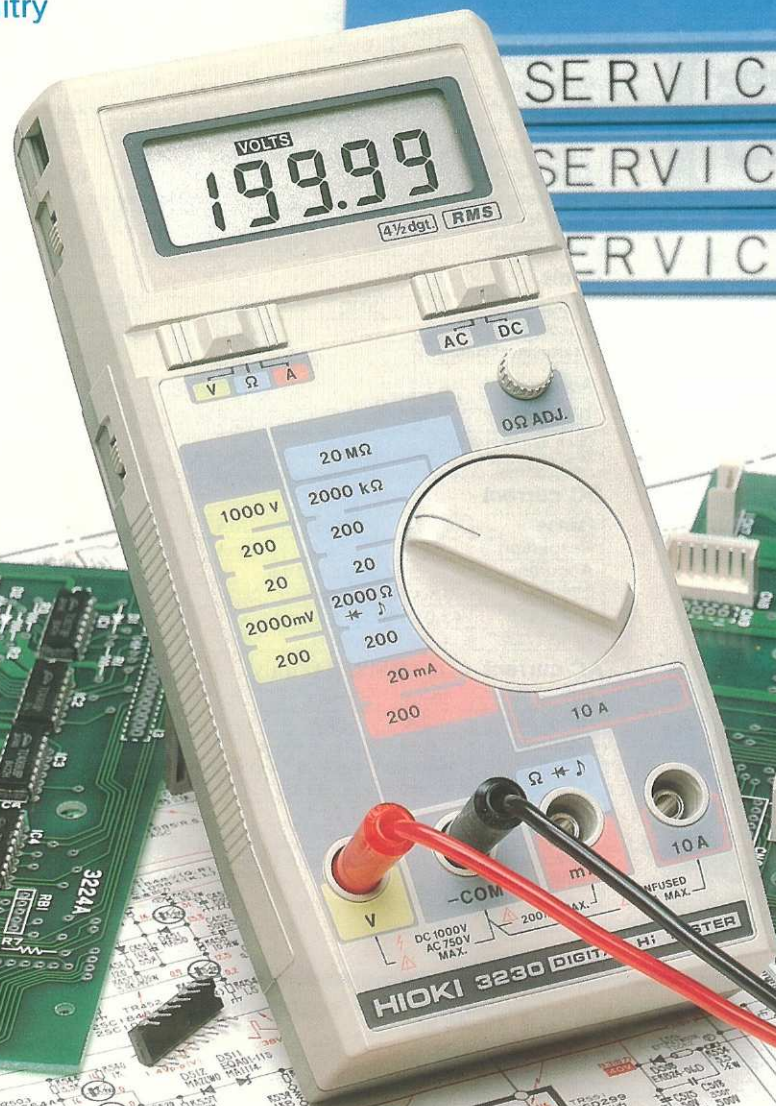
HIOKI

DIGITAL HI TESTER

3230

True RMS reading-Top quality-Affordable price 4½-digit hand-held multimeter

- 10 μ V resolution
- Basic DC accuracy, $\pm 0.04\%$ of reading
- True RMS responding meter
- AC/DC 10A range
- Custom IC circuitry



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Wideband Frequency Response

The HIOKI 3230 DIGITAL Hi TESTER is a true RMS responding 4½-digit multimeter featuring AC/DC voltage resolution of 10μV, quality construction, and hand-held convenience.

4½-digit (20000 count) resolution

Resolution is 10μV for both AC and DC voltage functions.

True RMS responding

True RMS response capability, combined with wide frequency response make AC measurements extremely accurate, even for non-sinusoidal or distorted waveforms.

Quick continuity/diode check

Continuity is confirmed by beeper tone and indicator lamp. The constant current diode test applies 1mA to the test diode and measures forward voltage drop.

Large digit custom LCD

An extra-large LCD with 12mm digits make both measurements and function indicators easy to read.



AC/DC 10A range

Seldom found in hand-held DMMs, current measurements of up to 10A are possible with the 3230.

Complete line of safety features

Equipped with recessed terminals and safety test leads, the ohms and mA circuits are protected up to AC 250V. Note also that the ohmmeter circuit is protected without the fuse blowing for accidental inputs of up to 100V.



General Specifications

Operating method: Integrating type Display: 4½-digit (19999) LCD (excluding DC 1000V, AC 750V, and AC/DC 10A range), function indicator, annunciators

Range switching: Manual Overrange display: MSD "1" lights (excluding DC 1000V, AC 750V, and AC/DC 10A range)

Polarity display: Automatic switching, minus sign (-) display for negative inputs.

Sample rate: 1.66 samples-per-second

Continuity test: Beeper sounds and Indicator appears

Diode check: Forward voltage measured and displayed with 1mA (approx) applied.

Operating temperature/humidity: 5~40°C, <80% RH (no condensation)

Storage temperature: -10~+50°C (no condensation)

Power source: 006P (9V) battery; continuous use, 70 hours (approx). AC Adaptor.

Dimensions/Weight: 180H×86W×34Dmm 350g (approx)

Accessories: Test lead set, spare fuse (0.5A/250V non-arcing, φ5×20mm), 006P battery.

Measurement Ranges (Conditions: 23±5°C, <80% RH; Accuracy guaranteed for six months.)

DC voltage

Range	200mV	2000mV	20V	200V	1000V
Resolution	10μV	100μV	1mV	10mV	100mV
Accuracy	±0.04%rdg.±2dgt.		±0.05%rdg.±2dgt.		
Input impedance	>100MΩ	Approx. 11MΩ	Approx. 10MΩ		
Digit instability	±3 dgt.				
Temperature coefficient	(±0.005%rdg. ±0.2dgt.)/°C				
Commonmode rejection	CMRR: >90dB, NMRR: >60dB				
Max. allowable input voltage	300V DC AC rms	1100V DC or DC+ AC Peak			

*NMRR specified for 50/60Hz, ±0.1%

AC voltage (True RMS, AC only)

Range	200mV	2000mV	20V	200V	750V
Resolution	10μV	100μV	1mV	10mV	100mV
Accuracy	40Hz~1kHz	±0.5%rdg.±30dgt.			±1%rdg.±30dgt.
Accuracy	1kHz~10kHz	±0.5%rdg.±30dgt.			
	10kHz~20kHz	±0.5%rdg.±40dgt.	±1%rdg.±40dgt.		
	-0.6dBat 100kHz (100% of range), -2dBat 100kHz (100% of range)				
Input impedance	>100MΩ // <100pF	Approx. 10MΩ	// <100pF		
Digit instability	10dgt.				
Temperature coefficient	(Measurement accuracy) × 0.1/°C				
Crest factor	2.2: 1 at full-scale				
Max. allowable input voltage	220V DC AC rms	1100V Peak or 10 ³ V·Hz			

Ohms

Range	200Ω	2000Ω	20kΩ	200kΩ	2000kΩ	20MΩ
Resolution	10mΩ	100mΩ	1Ω	10Ω	100Ω	1kΩ
Measurement current	1mA		10μA		1μA	100nA
Accuracy	±0.07%rdg.±2dgt.			±0.1%rdg.±5dgt.		±0.5%rdg.±10dgt.
Temperature coefficient	(±0.01%rdg.±0.5dgt.)/°C					±0.05%rdg.±1dgt./°C*
Open terminal voltage	Approx. 4V					
Max. allowable input voltage	250V DC or AC rms (fuse protection)					

DC current

Range	20mA	200mA	10A
Resolution	1μA	10μA	1mA
Accuracy	±0.6%rdg.±2dgt.		
Internal resistance	Approx. 10Ω	Approx. 1Ω	Approx. 10mΩ
Temperature coefficient	(±0.06%rdg.±2dgt.)/°C		
Max. allowable input current	(fuse protection)		*20A

AC current (True RMS, AC only)

Range	20mA	200mA	10A
Resolution	1μA	10μA	1mA
Accuracy	±1.0%rdg.±40dgt.		
Internal resistance	Approx. 10Ω	Approx. 1Ω	Approx. 10mΩ
Temperature coefficient	(±0.01%rdg.±1dgt.)/°C		
Crest factor	2.2: 1		
Max. allowable input current	(fuse protection)		*20A

* Accuracy specified for inputs within 10% of fullscale.

* 10A RANGE: No fuse protection.

* Measurement time: 10sec.

Range	2000Ω
Threshold value	Approx. (100Ω ~ 400Ω)
Response time	< 0.1 sec.

* Other specifications same as for 2000Ω range.

Standard packing (double carton box)

	Sets	N.W.kg	G.W.kg	M ³
3230	30	14	16	0.10m ³

Accessories

9352 Carrying case

9014 High voltage probe

HIOKI E.E. CORPORATION

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