

3256 DIGITAL HiTESTER

Field Measuring Instrument



A wide-range digital multimeter with the emphasis on safety

Conformable to IEC 1010 and EMC directive.

The 3256 is a general-purpose digital multimeter with the emphasis on safety: a terminal shutter interlock mechanism coupled to the rotary function selection switch prevents wrong connections. In addition to AC/DC 560mV ranges, the unit has a wide set of current ranges, from 56 μ A to 10 A. Analog measurement look-and-feel is also available, with the bar graph function.

WARNING

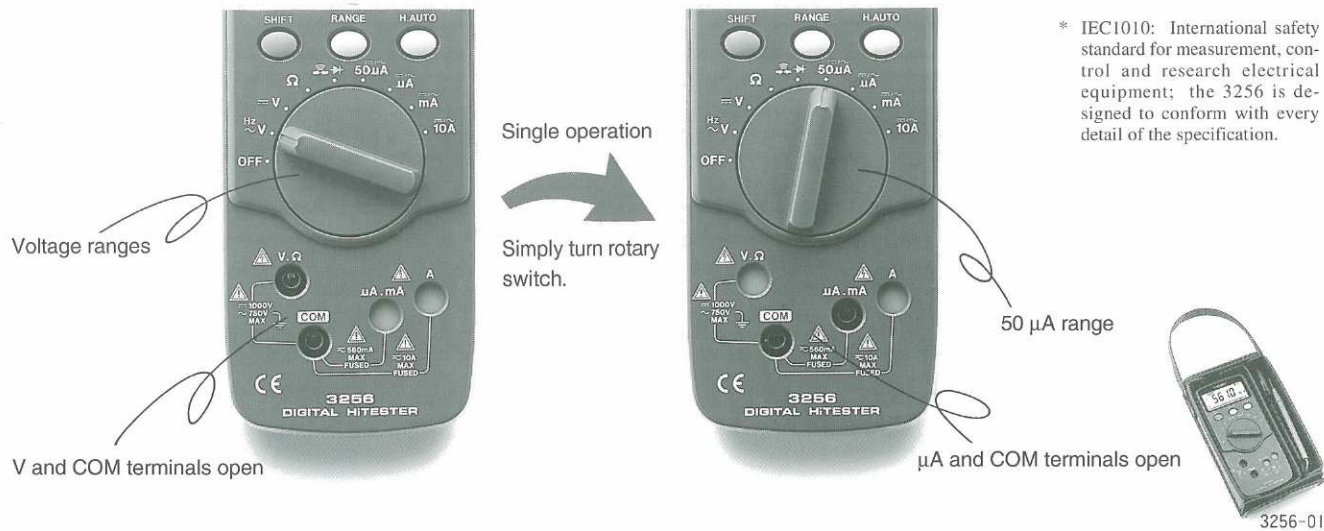
- In some cases, power lines may carry voltage spikes of several times the normal supply voltage. For reasons of safety, ordinary testers should not be used to measure power lines carrying more than 250V.
- When measuring such power lines, always use a tester with built-in overcurrent protection to guard against short circuits (for example, the 3008 and the 3255).
- When measuring currents on power lines, use a clamp-on tester is designed for measuring live lines.

Note: The term "power line" refers to the entire electrical circuit providing power to factories, buildings, and industrial machines. However, it does not include electrical circuits in ordinary dwellings (lines protected by fuses of circuit breakers).

- The terminal shutter interlock mechanism exposes only the correct terminals for connection in the currently selected function.
- Wide current range, from 56 μ A to 10 A.
- Minimum voltage range (AC and DC) is 560 mV.
- Frequency measurement up to 400 kHz.
- Bar graph function.
- Conformable to IEC 1010 and EMC directive.
- Maximum reading 5610.
- Hold-auto function automatically displays maximum voltage or current value and minimum resistance value.
- Auto power saving function.
- Overload circuit protection to 600 V AC/DC. (Resistance Function)

Terminal shutter interlock mechanism for foolproof operation -- IEC 1010 safety standard compliance

Terminal shutter mechanism eliminates erroneous terminal connections.



■ Specification

Measurement ranges (23°C ± 5°C, 80% R.H. max., no condensation)

Function	Range	Accuracy	Notes
DC voltage	560.0mV	±0.35%rdg.±4dgt.	Input impedance Approx. 11MΩ Approx. 11MΩ Approx. 10MΩ Approx. 10MΩ Approx. 10MΩ
	5.600 V	±0.35%rdg.±2dgt.	
	56.00 V	±0.6%rdg.±2dgt.	
	560.0 V	±0.6%rdg.±2dgt.	
	1000 V	±1.0%rdg.±2dgt.	
AC voltage	560.0mV	±2.0%rdg.±10dgt.	Input impedance Approx. 11MΩ; Measurement Approx. 10MΩ; frequency 50 Approx. 10MΩ; to 500 Hz Approx. 10MΩ;
	5.600 V	±1.5%rdg.±4dgt.	
	56.00 V	±1.5%rdg.±4dgt.	
	560.0 V	±1.5%rdg.±4dgt.	
	750 V	±1.5%rdg.±4dgt.	
Frequency	149.99 Hz	±0.02%rdg.±1dgt.	Manual selection of input sensitivity range: 5.6V, 56V, 560V or 1000V. Measurement possible with input of at least 71% of range full scale value, except in 5.6V range, where an input of at least 400mV is sufficient up to 50kHz. Maximum measurable input in each range of input sensitivity is 50V, 500V, 1000V and 1000V respectively.
	1499.9 Hz	±0.02%rdg.±1dgt.	
	14.999kHz	±0.02%rdg.±1dgt.	
	149.99 Hz	±0.02%rdg.±1dgt.	
	400.0kHz	±0.02%rdg.±1dgt.	
Resistance	560.0 Ω	±1.0%rdg.±6dgt.	Open-circuit terminal voltage approx. 0.3 V
	5.600 kΩ	±0.5%rdg.±4dgt.	
	56.00 kΩ	±0.5%rdg.±4dgt.	
	560.0 kΩ	±0.5%rdg.±4dgt.	
	5.600MΩ	±1.0%rdg.±4dgt.	
Conductivity check	560.0 Ω	±1.5%rdg.±6dgt.	Open-circuit terminal voltage approx. 1.23 V Threshold level: 100 Ω±80 Ω
Diode test	2.000 V	±5.0%rdg.±2dgt.	Test method: 300 µA constant current
DC current	56.00 µA	±1.5%rdg.±4dgt.	Internal resistance 10.5kΩ max. 110 Ω max. 110 Ω max. 3 Ω max. 3 Ω max. 0.1 Ω max.
	560.0 µA	±1.5%rdg.±4dgt.	
	5.600 mA	±1.5%rdg.±4dgt.	
	56.00 mA	±1.5%rdg.±4dgt.	
	10.00 A	±1.5%rdg.±4dgt.	
AC current	56.00 µA	±2.5%rdg.±4dgt.	Internal resistance 10.5kΩ max.: 110 Ω max.: 110 Ω max.: 3 Ω max.: 3 Ω max.: 0.1 Ω max.:
	560.0 µA	±2.5%rdg.±10dgt.	
	5.600 mA	±2.5%rdg.±4dgt.	
	56.00 mA	±2.5%rdg.±10dgt.	
	10.00 A	±2.5%rdg.±4dgt.	

* In 10 A range, measurement is continuous up to 7 A; from 7 to 10 A, measurement for 1 minute maximum.

Measurement method:	Double integration
Display:	3 1/2 digit LCD; maximum reading 5610 Maximum reading for frequency; 14999
Range switching:	Automatic and manual
Sampling rate:	2.5 samples/s (other than frequency) 2 samples/s (frequency) 20 samples/s (bar graph)
Withstand voltage:	7.4 kV rms AC sine wave (50/60 Hz for 1 minute) input between terminals and body
Overload protection	
Voltage functions:	1000 V DC / 750 V AC (sine wave) circuit protection
Resistance functions:	600V DC/AC rms (sine wave) circuit protection
Current functions:	10 A range 10 A / 250 V fuse protection Other ranges 1 A / 250 V fuse protection
Operating temperature range:	0 to 40°C, 80% R.H. maximum, must be no condensation
Power supply:	R03/AAA × 2 batteries (operating life approx. 500 h continuous on DC V range)
Power consumption:	2.0 mW typical (DC V ranges)
Battery low indication:	"B" indication appears when battery voltage is 2.25 V ± 0.15 V or below.
Dimensions and mass:	76mm(W)×167mm(H)×33mm(D); approx. 280g
Accessories:	9170 test leads, 1 A / 250 V fuse (fusing capacity 1500 A), 10 A / 250 V fuse (fusing capacity 750 A)
Safety standards:	Complies with IEC 1010-1 overload voltage category III
Electromagnetic compatibility:	EN55011, EN50082-1

3256 DIGITAL HiTESTER
3256-01 DIGITAL HiTESTER (with 9378 case)

Options
9170 TEST LEADS
9378 CARRYING CASE
9014 30kV DC High-Voltage Probe

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