

VOLTCRAFT

VOLTCRAFT – TOP PERFORMANCE IN EVERY WAY

For more than 40 years, our product range has been dynamically adapting to the constant changes in the industry. We commit to offering first-class quality to our customers while delivering an excellent cost-performance ratio. This philosophy remains the cornerstone of Voltcraft's success.

VC232 DIGITAL MULTIMETER



Item no. 2576860

A robust CAT III 600 V digital multimeter for professional, industrial and do-it-yourself applications.

FEATURES

- CAT III 600 V measuring category
- Complies with EN 61010-1 and EN 61010-2-033
- Measures direct and alternating voltages up to 600 V
- Measures direct and alternating currents up to 10 A
- Measures resistances up to 20 M Ω
- Battery tests for 1.5 V and 9 V batteries
- Continuity tests (<10 Ω acoustic)
- Diode tests
- Non-contact V/AC voltage detection (NCV)



TECHNICAL DATA

Display	2000 counts
Measurement interval	approx. 2-3 measurements/second
AC measurement method	True RMS, AC-coupled
Test lead length	approx. 90 cm
Measuring impedance	10 M Ω (200 mV: ≥ 100 M Ω)
Measuring terminal clearance	19 mm (COM-V)
Low battery indicator Battery voltage	<3.6 \pm 0.2 V
"Dangerous voltage" indicator	≥ 30 V/AC-DC
"Range exceeded" alarm	≥ 600 V/AC-DC, ≥ 10 A/AC-DC, ≥ 200 mA/AC-DC
"OL" (overload) alarm	≥ 610 V/AC-DC, $\geq 10, 10$ A/AC-DC or measurement >2000 counts
Automatic power-off	after approx. 15 minutes (can be manually disabled)
Current consumption (auto off)	<50 μ A
Operating voltage	3x AAA 1.5 V batteries
Operating conditions	0 to +40 $^{\circ}$ C (<75% RH)
Operating altitude	max. 2000 m above sea level
Storage temperature	-10 to +50 $^{\circ}$ C
Weight	approx. 375 g
Dimensions (L x W x H)	190 x 90 x 43 mm
Measuring category	CAT III 600 V
Pollution degree	2
Operating environment	Indoor use
Meets	EN 61010-1 and EN 61010-2-033
F1 FUSE	$\varnothing 6.35 \times 32$ mm, FF 10 A, H 600 V, breaking capacity: 10 kA
F2 FUSE	$\varnothing 5 \times 20$ mm, FF 2.5 A, H 700V, breaking capacity: min 300 A

Direct voltage (V/DC)

Range	Resolution	Accuracy
200.0 mV	0.1 mV	$\pm(0.9\% + 8)$
2.000 V	0.001 V	$\pm(0.9\% + 4)$
20.00 V	0.01 V	
200.0 V	0.1 V	
600 V	1 V	$\pm(1.3\%+7)$
Specified measuring range: 5–100% of the measuring range 600 V overload protection; Impedance: 10 M Ω (mV: ≤ 100 M Ω) The multimeter may display ≤ 5 counts if a measuring input is short-circuited.		

Direct voltage (V/DC) LoZ

Range	Resolution	Accuracy
2.000 V	0.001 V	$\pm(1.7\% + 7)$
20.00 V	0.01 V	
200.0 V	0.1 V	
600 V	1 V	
Specified measuring range: 5–100% of the measuring range 600 V overload protection; Impedance: 400 k Ω (max. 250 V, 3 secs) The multimeter may display ≤ 5 counts if a measuring input is short-circuited. After using the LoZ feature, leave the multimeter for 1 minute before using it again.		

Alternating voltage (V/AC)

Range	Resolution	Accuracy
2.000 V	0.001 V	±(0.9% + 9)
20.00 V	0.01 V	
200.0 V	0.1 V	
600 V	1 V	
Specified measuring range: 5–100% of the measuring range Frequency range: 45–400 Hz; 600 V overload protection; Impedance: 10 MΩ The multimeter may display 5 counts if a measuring input is short-circuited.		
TrueRMS peak (Crest Factor (CF)) ≤3 CF to 600 V TrueRMS peak for non-sinusoidal signals plus tolerance CF >1.0 - 2.0 + 3% CF >2.0 - 2.5 + 5% CF >2.5 - 3.0 + 7%		

Alternating voltage (V/AC) LoZ

Range	Resolution	Accuracy
2.000 V	0.001 V	±(1.9% + 5)
20.00 V	0.01 V	
200.0 V	0.1 V	
600 V	1 V	
Specified measuring range: 5–100% of the measuring range Frequency range: 45–400 Hz; 600 V overload protection; Impedance: 10 MΩ (mV: ≤100 MΩ) The multimeter may display 5 counts if a measuring input is short-circuited. After using the LoZ feature, leave the multimeter for 1 minute before using it again.		
TrueRMS peak for non-sinusoidal signals plus tolerance TrueRMS peak (Crest Factor (CF)) ≤3 CF to 600 V CF >1.0 - 2.0 + 3% CF >2.0 - 2.5 + 5% CF >2.5 - 3.0 + 7%		

Direct current (A/DC)

Range	Resolution	Accuracy
200.0 μA	0.1 μA	±(0.9% + 5)
2000 μA	1 μA	
20.00 mA	0.01 mA	
200.0 mA	0.1 mA	
2.000 A	0.001 A	±(1.5% + 7)
10.00 A	0.01 A	
600 V overload protection Fuses: μA/mA = 2x 0.5 5 A/240 V resettable, 1x F2 2.5 A/700 V ceramic 10 A = High-performance FF10A/600V ceramic fuse ≤ 6 A = continuous measurement, >6A = max. 30 secs at intervals of 15 minutes The multimeter may display 3 counts when a measuring input is open		

Alternating current (A/AC)

Range	Resolution	Accuracy
200.0 μA	0.1 μA	±(1.3% + 7)
2000 μA	1 μA	
20.00 mA	0.01 mA	
200.0 mA	0.1 mA	
2.000 A	0.001 A	±(2.4% + 7)
10.00 A	0.01 A	
600 V overload protection Fuses: μA/mA = 2x 0.5 5 A/240 V resettable, 1x F2 2.5 A/700 V ceramic 10 A = High-performance FF10A/600V ceramic fuse ≤ 6 A = continuous measurement, >6A = max. 30 secs at intervals of 15 minutes The multimeter may display 3 counts when a measuring input is open		
TrueRMS peak (Crest Factor (CF)) ≤3 CF over the entire range TrueRMS peak for non-sinusoidal signals plus tolerance CF >1.0 - 2.0 + 3% CF >2.0 - 2.5 + 5% CF >2.5 - 3.0 + 7%		

Resistance

Range	Resolution	Accuracy
200.0 Ω *	0.1 Ω	$\pm(1.3\% + 4)$
2.000 k Ω *	0.001 k Ω	$\pm(1.2\% + 7)$
20.00 k Ω	0.01 k Ω	
200.0 k Ω	0.1 k Ω	
2.000 M Ω	0.001 M Ω	$\pm(1.5\% + 4)$
20.00 M Ω	0.01 M Ω	$\pm(2.7\% + 7)$

600 V overload protection
Measuring voltage: Approx. 1.0 V, measuring current approx. 0.7 mA
*Accuracy for measuring range $\leq 200 \Omega$ was calculated after deducting lead resistance from the REL function

Battery test

Range	Load resistance	Resolution	Accuracy
1.5 V	Approx. 100 Ω	0.001 V	$\pm(0.9\% + 8)$
9 V	Approx. 900 k Ω	0.01 V	

600 V overload protection
Fuses: $\mu\text{A}/\text{mA} = 2 \times 0.5 \text{ A}/240 \text{ V}$ resettable, 1x F2 2.5 A/700 V ceramic

Diode test

Test voltage	Resolution
Approx. 3.0 V/DC	0.001 V

Overload protection: 600 V; Test voltage: 2 mA.

Acoustic continuity test

Measurement range	Resolution
200 Ω	0.1 Ω

$\leq 10 \Omega$ continuous tone; $\geq 100 \Omega$ no tone
Overload protection: 600 V
Test voltage approx. 1 V
Test current $< 1.5 \text{ mA}$

PACKAGE CONTENTS

Digital multimeter // 2x safety test leads with CAT III protective caps // 3x AAA 1.5 V batteries // Operating instructions