

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.

VC131 DIGITAL MULTIMETER



Item no. 2446476

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

FEATURES

- AC / DC voltage measurement
- DC current measurement up to 10 A
- Diode test
- Acoustic continuity tester
- Hold function
- Auto power off
- Backlight
- 2000 counts
- Auto range
- 600 V high performance fuses
- CAT III 600 V measuring category
- Torch function



TECHNICAL DATA

Intended use	Indoor use
Voltage supply	9 V block battery (6F22, NEDA 1604 or same)
Operating time/battery	approx. 35 h (backlight always on, torch off, buzzer off)
Measuring impedance	approx. 10 M Ω (200 mV: ≥ 100 M Ω)
Display range	2000 counts (characters)
Refresh rate	2-3x per sec
Measuring line length	each approx. 90 cm
Low battery indicator	≤ 6 V ± 0.2 V
Measuring jacks distance	19 mm (COM-V)
Auto power off	approx. 15 minutes
Data hold	approx. 15 minutes
Measuring category	\leq CAT III 600 V
Degree of contamination	2
Direct voltage	max. 600.0 V / DC
Alternating voltage	max. 600.0 V / AC
Direct current	max. 10.00 A / DC
Resistance	max. 20 M Ω
Operating temperature	0 to +40 °C
Storage temperature	-10 to +50 °C
Operating/storage humidity	0 to +30 °C: ≤ 75 % RH (non-condensing) +30 to +40 °C: ≤ 50 % RH (non-condensing)
Operating altitude	max. 2000 m (above sea level)
Dimensions (W x H x D):	76.5 x 157.5 x 40 mm
Weight	approx. 262 g (without battery)
F1 Fuse	$\varnothing 5$ x 20 mm, FF 200mA H 600 V, Breaking capacity: 500 A min., Input terminal protection (μ A, mA)
F2 Fuse	$\varnothing 6$ x 32 mm, FF 10A, H 600V, Breaking capacity: 10 KA, Input terminal protection (A)

Continuity (••) and diode (▶) test

Range	Resolution	Remark
••)	0.1 Ω	<ul style="list-style-type: none"> Open circuit: Resistance > 100 Ω, no beep. Circuit with a good connection: Resistance ≤ 10 Ω, consecutive beeps.
▶	1 mV	<ul style="list-style-type: none"> Open circuit voltage: Approx. 2.2 V Silicon PN junction voltage: Approx. 0.5 to 0.8 V
Overload protection: 600 V		

DC voltage measurement

Range	Resolution	Accuracy
200.0 mV	0.1 mV	$\pm (0.5 \% + 8)$
2.000 V	0.001 V	
20.00 V	0.01 V	
200.0 V	0.1 V	
600 V	1 V	$\pm (0.8 \% + 7)$
<ul style="list-style-type: none"> Input impedance: ≥ 100 MΩ for mV range (short circuit allows ≤ 5 digits), approx 10 MΩ for other ranges. Input voltage: max. 600 V 		

AC voltage measurement

Range	Resolution	Accuracy
200.0 V	0.1 V	± (1.5 % + 7)
600 V	1 V	

- Input impedance: approx. 10 MΩ.
- Frequency response: 50 - 60 Hz.
- Accuracy guarantee range: 5~100% of range, short circuit allows least significant digit <5.
- Non-sinusoidal waveforms:
 - When the crest factor is 1.0 to 2.0, the accuracy must be increased by 4.0 %.
 - When the crest factor is 2.0 to 2.5, the accuracy must be increased by 5.0 %.
 - When the crest factor is 2.5 to 3.0, the accuracy must be increased by 7.0 %.
- Input voltage: max. 600 Vrms.

Resistance measurement (Ω)

Range	Resolution	Accuracy
200.0 Ω	0.1 Ω	± (1.0 % + 5)
2000 Ω	1 Ω	± (1.0 % + 9)
20.00 kΩ	10 Ω	
200.0 kΩ	100 Ω	
2.000 MΩ	1 kΩ	± (2.5 % + 5)
20.00 MΩ	10 kΩ	± (2.5 % + 5)

Overload protection: 600 V

DC current measurement

Range	Resolution	Accuracy
μA	200.0 μA	± (1.2 % + 4)
	2000 μA	
mA	20.00 mA	± (1.5 % + 8)
	200.0 mA	
A	10.00 A	± (2.5 % + 10)

- When the measured current is >5 A, each measurement time should be ≤30 s and the rest interval should be ≥15 minutes.
- Overload protection:
 - F1 Fuse: μA mA range, ø5 x 20 mm, FF 200mA H 600 V, Breaking capacity: 500 A min.
 - F2 Fuse: 10A range, ø6 x 32 mm, FF 10A, H 600V, Breaking capacity: 10 KA

PACKAGE CONTENTS

Digital multimeter // 9 V block battery // Test leads (pair) // Operating instructions