Data Sheet

MarMonix MVC 97
Digital Multimeter

Quick Spec Highlights

- **Measurement Range:** Up to 1000 V DC / 750 V AC, 10 A current, 40 MΩ resistance, 40 mF capacitance, −20 °C to +1000 °C temperature
- **Accuracy:** ±(0.5% reading + 8 digits) DCV, ±(1% reading + 10 digits) ACV
- **Display:** 4000-count backlit LCD with auto polarity and over-range indication

Key Features

- **True RMS Measurement:** Ensures reliable accuracy for both sinusoidal and distorted waveforms across AC voltage and current.
- **Comprehensive Functionality:** Measures voltage, current, resistance, capacitance, frequency, duty cycle, temperature, diode, continuity, and includes non-contact voltage detection (NCV).
- **Safety Protection:** CAT II 1000V rating, fused current inputs (GR256/400 mA fuse, F10A/250V 10 A fuse), and overload protection on all ranges.
- **User-Centric Design:** 4000-count LCD with backlight, auto power-off, low-battery indication, and data hold for improved usability in the field.
- **Versatile Input & Outputs:** Includes square-wave generator output and temperature measurement with K-type thermocouple support.
- **Portable & Durable:** Compact (138 × 68 × 35 mm, 158 g) housing with protective holster, engineered for reliability in industrial and educational environments.

Ordering Info

- **Part Number** : 7603261
- **GTIN**: 6298043998345

Package Contents

- 1 × MVC 97 (main unit)
- 1 × Test Lead
- 1 × Thermocouple Probe
- 2 × AAA Battery
- 1 × User Manual
- 1 × Certificate of Conformity
- 1 × Warranty Card

Warranty

This device is covered by a 2-year warranty from the date of purchase, ensuring reliability and long-term support. The warranty applies to defects in materials and workmanship under normal use. It excludes consumables (fuses, disposable batteries) and damage caused by accident, misuse, modification, contamination, or operation outside specified conditions.

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Specifications

DC voltage Measurement		
Measuring Range	Resolution	Accuracy
400 mV	0.1 mV	±(0.5% Reading + 8 digits)
4 V	1 mV	
40 V	10 mV	
400 V	100 mV	
1000 V	1 V	

AC voltage Measurement		
Measuring Range	Resolution	Accuracy
400 mV	0.1 mV	±(1% Reading + 10 digits)
4 V	1 mV	
40 V	10 mV	
400 V	100 mV	
750 V	1 V	

Frequency Measurement		
Measuring Range	Resolution	Accuracy
9.999 Hz	0.001 Hz	±(1.5% Reading + 5 digits)
99.99 Hz	0.01 Hz	
999.9 Hz	0.1 Hz	
9.999 kHz	0.001 kHz	
99.99 kHz	0.01 kHz	
999.9 kHz	0.1 kHz	
9.999MHz	0.001MHz	

Duty Cycle Measurement		
Measuring Range	Resolution	Accuracy
1% ~ 99%	0.1%	±(2.5% Reading + 5 digits)

Capacitance Measurement		
Measuring Range	Resolution	Accuracy
40 nF	0.01 nF	±(4% Reading + 5 digits)
400 nF	0.1 nF	
4 µF	0.001 µF	
40 µF	0.01 µF	
400 µF	0.1 µF	
4 mF	0.001 mF	
40 mF	0.01 mF	±(4% Reading + 10 digits)

Diode Measurement	
Function	Testing Conditions
Diode Test	Forward DC current: approx. 1.2 mA Open-circuit voltage: approx. 4 V Display shows the approximate forward voltage drop of the diode
Continuity Test	The buzzer sounds when resistance is less than 50 Ω

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Specifications

Resistance Measurement		
Measuring Range	**Resolution**	**Accuracy**
400 Ω	0.1 Ω	±(0.8% Reading + 5 digits)
4 kΩ	1 Ω	
40 kΩ	10 Ω	
400 kΩ	100 Ω	
4 MΩ	1 kΩ	
40 MΩ	10 kΩ	

Temperature Measurement		
Measuring Range	**Resolution**	**Accuracy**
-20°C ~ 1000°C	1°C	±(1% Reading + 3 digits)
-4°F ~ 1832°F	1°F	

DC current Measurement		
Measuring Range	**Resolution**	**Accuracy**
40 mA	0.01 mA	±(1.2% Reading + 5 digits)
400 mA	0.1 mA	
10 A	10 mA	±(3% Reading + 5 digits)

AC current Measurement		
Measuring Range	**Resolution**	**Accuracy**
40 mA	0.01 mA	±(1.5% Reading + 5 digits)
400 mA	0.1 mA	
10 A	10 mA	±(3% Reading + 5 digits)

Disclaimer

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