



# **VOLTCRAFT®**

## **VOLTCRAFT® - TOP PERFORMANCE IN EVERY WAY**

“For more than 25 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.”

# **R-200**

# **MILLIOHM-METER**

**N° 101393**

**CE**

VERSION 09/14

The R-200 enables milliohm resistance measurements from 0.1 m $\Omega$  to 40  $\Omega$  with high resolution and accuracy to transformers, circuits, ring-bus systems, components, etc. High accuracy due to 4-cable Kelvin measuring procedure.

## **HIGHLIGHTS**

**High accuracy //**

**High resolution //**

**Additional multi-meter measuring functions //**

**Test current up to 200 mA //**

**Multimeter with measurement functions  
V/AC, V/DC,  $\Omega$ , F, mA/AC, mA/DC,  
acoustic continuity tester and diode test //**

**Rel-/Min-/Max- and hold function //**

**Background lighting //**

**Auto power-off //**



# TECHNICAL DATA

Display	LCD, 4000 Counts (digits) with bargraph
Measuring rate	approx. 2 measuring operations/second
Measuring lead length	approx. 80 cm each
Measuring impedance	>10MΩ (V range)
Automatic Power-Off	approx. 30 minutes
Voltage supply	6 x mignon batteries (AA)
Working conditions	0 - 40°C (<80%rF)
Operating altitude	max. 2,000 m
Storage temperature	-10°C to +60°C (<70%rF)
Earth DMM	approx. 550 g
Dimensions (LxWxH)	200 x 92 x 50 (mm)
Over-voltage category	CAT III 600 V, Impurity level 2

## DC Voltage

Range	Resolution	Accuracy
400 mV	0.1 mV	±(1.0% + 5)
4 V	0.001 V	±(1.2% + 52)
40 V	0.01 V	
400 V	0.1 V	
600 V	1 V	
Overload protection: 600 V; Impedance approx. 10 MOhm		

## AC Voltage

Range	Resolution	Accuracy 50-60 Hz	Accuracy 400 Hz
400 mV	0.1 mV	±(1.2% + 10)	±(2.5% + 10)
4 V	0.001 V		
40 V	0.01 V	±(1.0% + 10)	±(1.2% + 10)
400 V	0.1 V		
600 V	1 V		
Frequency range 50 – 400 Hz; effective average at sinusoidal voltage; overload protection 600 V; Impedance approx. 10 MOhm			

## DC Current

Range	Resolution	Accuracy
400 μA	0.1 μA	±(1.5% + 5)
4000 μA	1 μA	
40 mA	0.01 mA	
400 mA	0.1 mA	
Overload protection: 600 V, fuse FF500 mA		

## AC Current

Range	Resolution	Accuracy
400 μA	0.1 μA	±(1.5% + 5)
4000 μA	1 μA	
40 mA	0.01 mA	
400 mA	0.1 mA	
Overload protection: 600 V, fuse FF500 mA; frequency range 50-400 Hz		

### Resistance 2-lead measurement

Range	Resolution	Accuracy
400 $\Omega$	0.1 $\Omega$	$\pm(1.0\% + 4)$
4 k $\Omega$	0.001 k $\Omega$	
40 k $\Omega$	0.01 k $\Omega \pm(1.5\% + 2)$	
400 k $\Omega$	0.1 k $\Omega$	
4 M $\Omega$	0.001 M $\Omega$	$\pm(2.5\% + 3)$
40 M $\Omega$	0.01 M $\Omega$	$\pm(3.5\% + 5)$
Overload protection 600 V		

### Resistance 4-lead measurement

Range	Resolution	Accuracy	Test current
400 m $\Omega$	0.1 m $\Omega$	$\pm(1.0\% + 10)$	200 mA
4 $\Omega$	0.001 $\Omega$	$\pm(1.0\% + 5)$	20 mA
40 $\Omega$	0.01 $\Omega$		2 mA
Overload protection 30 V			

### Capacity

Range	Resolution	Accuracy
4 nF	0.001 nF	not specified
40 nF	0.01 nF	$\pm(5.0\% + 20)$
400 nF	0.1 nF	$\pm(3.0\% + 10)$
4 $\mu$ F	0.001 $\mu$ F	
40 $\mu$ F	0.01 $\mu$ F	
400 $\mu$ F	0.1 $\mu$ F	$\pm(4.0\% + 10)$
4 mF	0.001 mF	$\pm(10.0\% + 10)$
10 mF	0.01 mF	$\pm(15\% + 10)$
Overload protection 600 V		

### Diode Test

Test voltage	Resolution	Test current
2.8 V	0.001 V	1 mA (typical)
Overload protection 600 V		

# PACKAGE CONTENT

R-200 // 1 set of Kelvin measurement cables // 6 batteries (type AA) // Strong storage case // Operating instructions

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