

Specifications

(Reference Temperature: 23°C ±1°C)

Operating Modes:

Milliohm Measurement
Diode test

Milliohm Measurement:

Range: 200mΩ to 20kΩ (6 decades)
Principle of Measurement: 4-point Kelvin technique
Resolution: 0.1mΩ maximum
Accuracy: Range 200mΩ to 20Ω: 0.25% o.v.²⁾±2 digit
 Range 200Ω to 20kΩ: 0.25% o.v.²⁾±1 digit

Probe tip voltage and measuring current:

Range	Voltage ¹⁾	Current	Meas. Voltage
200mΩ	6mV	20mA	4mV
2Ω	6mV	2mA	4mV
20Ω	6mV	0,2mA	4mV
200Ω	300mV	1mA	200mV
2000Ω	300mV	100µA	200mV
20kΩ	300mV	10µA	200mV

Max. permissible input voltage: ±30V

Diode Testing:

Voltage range: 1999mV
Accuracy: 0.25% o.v.²⁾±1 digit
Probe tip voltage and measuring current:

Range	Voltage ¹⁾	Current	Meas. Voltage
1999mV	3V	20mA	2V
1999mV	3V	2mA	2V
1999mV	3V	200µA	2V

The measuring currents are selected via the pushbuttons for the resistance ranges.
Max. permissible input voltage: ±30V

Display:

3½-digit 7-segment LED-display
Measuring rate: 3 measurements/sec.

General Information:

Audible Signal: Frequency changes according to the measured resistance value.
Loudspeaker: Built-in
Volume Control: Adjustable, Front Panel.
Power Output: 250mW.
Speaker Shutoff: via Phone Jack.
Zero Calibration: at Front Panel Access.

Supply voltages (from HM8001):

- + 5V/250mA
- +7.5V/60mA
- 5V/60mA
- (Σ 2.45W)

Operating conditions: 0°C to +40°C
 max. relative humidity: 80%
Dimensions (without 22-pin flat connector):
W135, H68, D228mm
Weight: approx. 650g

¹⁾ open circuit probe tip voltage
²⁾ o.v. = of value

Values without tolerances are meant to be guidelines and represent characteristics of the average instrument.

Subject to change without notice

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Milliohm Meter HM8014

- 200mΩ to 20kΩ Measurement Range (6 Ranges)
- 0.1mΩ Maximum Resolution
- 20mA max. Meas. Current; Probe Tip Voltage: 4mV
- Diode Test Function; Audible Fault Tone
- 3½ Digit LED Numeric Display
- 4 Terminal Kelvin Measurement
- 4 Point Kelvin Test Cable with 2 Probes included

The **HM8014** Milliohm Meter has been designed to precisely measure low resistances through a measurement range of **0.1mΩ to 20kΩ**, with 4 wire measurement capability. It is ideal for test of the DC resistance of coils, location of shorts on printed circuit boards and for transformers. A **diode-test** function permits semiconductor tests with three different constant current values.

Measurements can be assisted by an **audible signal** that changes frequency according to the measured resistance, for example on a length of printed conductor. Audible **volume is adjustable** and can be also re-directed to a headset. The audible function offers a tangible feedback to allow the operator to trace the source of a shorted conductor or circuit.

Low probe tip voltage, 4mV, and **low test current** allow measurement of assembled circuit boards, without the semiconductor junctions altering the test results. The low test current (10µA to 20mA, maximum) permits damage-free test of sensitive on-board components.

Ease of operation and a clear front panel layout provide reliable results even for the inexperienced user.

Accessories supplied
 Operators Manual
 Kelvin probes HZ17

Optional accessories
 Headset
 information upon request

