



MMR-6500/6700

Microohmmeter

index: WMGBMMR6500 / WMGBMMR6700

- tests currents up to 100 A / 200 A
- voltage drop measurement
- high resistance to interference
- transformer winding resistance measurement
- measurement of electrical components earthed on both sides
- temperature compensation
- works with a printer and 2D code reader
- state-of-the-art interface and touch screen



DESCRIPTION

The MMR-6500 (MMR-6700*) digital meter is designed for measuring low resistances with a stabilised current of up to 100 A (*200 A). The use of test clamps enables the safe measurement of breakers (high-, medium- and low-voltage), isolators and other components earthed on both sides. The MMR-6500 (6700) series meters are equipped with a unique module in their class that measures inductive components which have a current of up to 10A, enabling the winding resistance of motors, transformers and other inductive components to be measured. Another useful function is the temperature measurement and the automatic compensation of results with relation to the measured temperature or temperature set by the user. The system is completed with a recorder function. Special measuring algorithms and additional functions allow an appropriate measuring method to be chosen depending on the measured component and measurement conditions, thus, widening the application areas of the meter. The state-of-the-art user interface, various communication interfaces, wireless communication and communication with the computer, printer, 2D code reader are integrals features which enable full, comfortable and intuitive management of not only measurements and their results but also ID data of measured components.

KEY FEATURES OF THE INSTRUMENT

- » resistance measurement of:
 - switch and contactor contacts, HV breakers, including those earthed on both sides,
 - fuses,
 - screw joints,
 - weld joints,
 - equipotential bondings,
 - contacts,
 - cable connections,
 - heating element connections,
 - rail joints,
 - conductors and cables,
 - windings (motors, transformers, etc.)
 - low-resistance coils,
 - soldered joints,
 - grounding conductors,
 - home and industrial systems,
- » voltage drop indication,
- » temperature measurement,
- » clamps for current leakage measurement,
- » working with a printer and 2D code reader,
- » large touch screen offering a clear display,
- » battery charge monitoring,
- » ergonomic operation,
- » protection against overheating.

MEASUREMENTS OF RESISTIVE COMPONENTS

Range [Ω]	Resolution [Ω]	Basic measurement uncertainty	Test current
0,0...999,9 μ	0,1 μ	±(0,25% + 2 digits)	100 A < I ≤ 200 A/* (200 mV)
0,0...999,9 μ	0,1 μ		50 A < I ≤ 100 A (200 mV)
1,0000...1,9999 m	0,0001 m		20 A < I ≤ 50 A (200 mV)
0,0...999,9 μ	0,1 μ		10 A < I ≤ 20 A (160 mV)
1,0000...3,9999 m	0,0001 m		
0,0...999,9 μ	0,1 μ		
1,0000...7,9999 m	0,0001 m		
0...999,9 μ	0,1 μ		10 A (20 mV)
1,0000...1,9999 m	0,0001 m		10 A (200 mV)
2,000...19,999 m	0,001 m		10 A / 1 A (2 V / 200 mV)
20,00...199,99 m	0,01 m		1 A / 0,1 A (2 V / 200 mV)
200,0...999,9 m	0,1 m		0,1 A (2 V)
1,0000...1,9999	0,0001		10 mA (2 V)
2,000...19,999	0,001		1 mA (2 V)
20,00...199,99	0,01		
200,0...1999,9	0,1		

/* - MMR-6700 only

MEASUREMENTS OF INDUCTIVE COMPONENTS

Range [Ω]	Resolution [Ω]	Basic measurement uncertainty	Test current / Voltage
0 μΩ...999,9 μ	0,1 μ	±(0,25% + 2 digits)	10 A
1,0000 mΩ...1,9999 m	0,0001 m		10 A
2,000 mΩ ...19,999 m	0,001 m		10 A / 1 A
20,00 mΩ...199,99 m	0,01 m		1 A / 0,1 A
200,0 mΩ ...999,9 m	0,1 m		0,1 A
1,0000 Ω...1,9999	0,0001		10 m
2,000 Ω...19,999	0,001		1 mA
20,00 Ω...199,99	0,01		
200,0 Ω...1999,9	0,1		

for measurements on inductive objects output voltage ≤ 5 V

TECHNICAL PARAMETERS

Housing protection level acc. to EN 60529:

closed cover	IP67
open cover	IP40
power supply for $I \leq 10A$ measurements	Li-Ion battery 7.2 V 8.8 Ah
MMR-6500: mains supply	100 V..265 V / 50 ..60 Hz, 10 A
MMR-6700: mains supply	100 V..265 V / 50 ..60 Hz, 16 A
battery charging time	approx. 3.5 h
maximum resistance for current of 10A	200 mΩ
current pre-setting accuracy	±10%
measurement time:	
resistance mode, with bidirectional current flow	7-15 s
inductive mode (depends on object resistance and inductance)	10 s or more
dimensions	401 mm x 307 mm x 175 mm
MMR-6500 meter weight	approx. 8.2 kg
MMR-6700 meter weight	approx. 8.7 kg
operating temperature	-10°C...+50°C
display	800x480 pixels
communication	USB, LAN, WiFi



BASIC ACCESSORIES

Current carrying test lead 3 m black I1 (200 A, 25 mm ²)	WAKRORE20K02
Current carrying test lead 3 m red I2 (200 A, 25 mm ²)	WAPRZ1X2REBB2X5
Test lead 3 m blue 1 kV U1 (banana plug)	WAPRZ003BUBBU1
Test lead 3 m blue 1 kV U2 (banana plug)	WAPRZ003BUBBU2
Crocodile clip black 1 kV 32 A 2 pcs	WAKROBL30K03
Double-wire test lead 3 m (10 / 25 A) U1/I1 (for ≤10 A measurements)	WAPRZ003DZBBU11
Double-wire test lead 3 m (10 / 25 A) U2/I2 (for ≤10 A measurements)	WAPRZ003DZBBU212
Kelvin clip 1 kV 25 A (2 pcs, for ≤10A measurements)	WAKROKELK06
ST-3 temperature sensor	WASONT3
Power cord 230 V (IEC C19 plug)	WAPRZZAS1
Case L12	WAFUTL12
USB data transfer cable	WAPRZUSB
Operating Instructions	
Calibration certificate	
PC software (Sonel Reader)	
Warranty card	

OPTIONAL ACCESSORIES

Current carrying test lead 6 m black I1 (max. 200 A, 25 mm ²)	WAPRZ006BLI1
Current carrying test lead 10 m black I1 (max. 200 A, 25 mm ²)	WAPRZ010BLI1
Current carrying test lead 15 m black I1 (max. 200 A, 25 mm ²)	WAPRZ015BLI1
Current carrying test lead 6 m red I2 (max. 200 A, 25 mm ²)	WAPRZ006BLI2
Current carrying test lead 10 m red I2 (max. 200 A, 25 mm ²)	WAPRZ010BLI2
Current carrying test lead 15 m red I2 (max. 200 A, 25 mm ²)	WAPRZ015BLI2
Test wire 6 m U1 blue	WAPRZ006BUBBU1
Test wire 10 m U1 blue	WAPRZ010BUBBU1
Test wire 15 m U1 blue	WAPRZ015BUBBU1
Test wire 6 m U2 blue	WAPRZ006BUBBU2
Test wire 10 m U2 blue	WAPRZ010BUBBU2
Test wire 15 m U2 blue	WAPRZ015BUBBU2
Clamps C-5A (Ø 39 mm) 1000 A AC/DC	WACEGC5AOKR
Kelvin vice with two test leads (banana plugs) (for ≤10 A measurements)	WAZACKEL1
Double-pin Kelvin probe (banana connectors) (2 pcs, for ≤10 A measurements)	WASONKEL20GB
LAN network cable with RJ45 plugs	WAPRZRJ45
ST-1 temperature probe	WASONT1
Report / code printer (USB, portable)	WAADAD2
SATO printer tape/paper (adhesive)	WANAKD2
SATO printer colour ribbons	WANAKD2BAR
2D code reader (USB)	WAADACK2D