



Low resistance within range

Product features

- measurement of very low resistance
- high immunity to disturbances
- easy operation
- big touchscreen
- automatic measurement mode
- autoranging

Application

The MMR-640 meter is designed to measure very low resistance of resistive objects. This product is made to be used in power plants, railways and maintenance companies to measure resistance of:

- breakers, contacts,
- earthing conductors, equipotential bondings,
- welded and soldered connections,
- bolted connections,
- and other resistive objects.

MMR-640 can be also utilized on production lines (eg. at the final production control stage).



Device capabilities

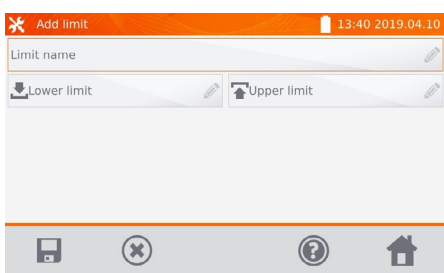
The MMR-640 meter provides an innovative combination of a high-performance measuring device with a modern user interface and advanced data management system.

Durable and practical casing

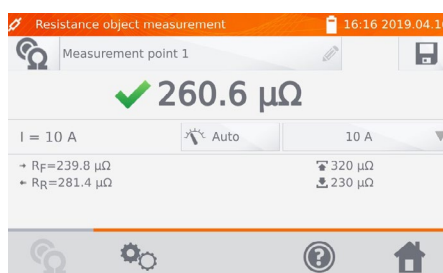
In response to the customers needs the MMR-640 has been designed to operate in difficult environmental conditions. A unique casing with the IP67 ingress protection rating ensures that the device is both waterproof and dustproof.

Easy readout

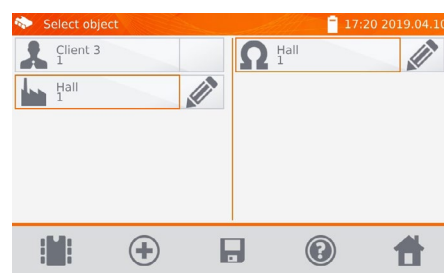
The MMR-640 meter is equipped with a readable colour touchscreen that, due to its 800 x 480 pixel resolution, provides both high comfort of interacting with the interface and high readability of the measurement results.



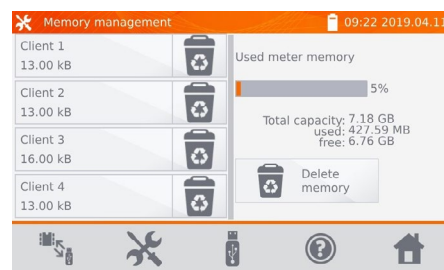
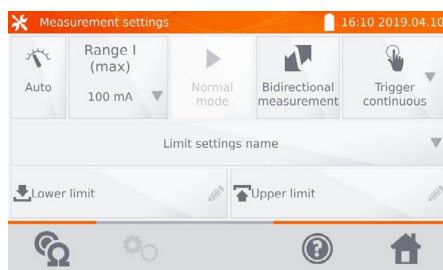
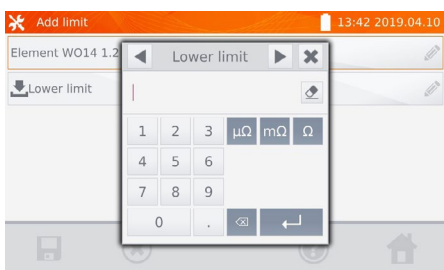
Possibility of setting limits



Readable interface



Extensive memory



Resistance measurement

Range	Resolution	Test current	Accuracy
0...999.9 μΩ	0.1 μΩ	10 A	±(0.25% m.v. + 2 digits)
1.0000...1.9999 mΩ	0.0001 mΩ		
2.000...19.999 mΩ	0.001 mΩ		
20.00...199.99 mΩ	0.01 mΩ	10 A / 1 A	
200.0...999.9 mΩ	0.1 mΩ	1 A / 0.1 A	
1.0000...1.9999 Ω	0.0001 Ω		
2.000...19.999 Ω	0.001 Ω		
20.00...199.99 Ω	0.01 Ω	10 mA	
200.0...1999.9 Ω	0.1 Ω	1 mA	

„m.v.” - measured value.

Technical specification

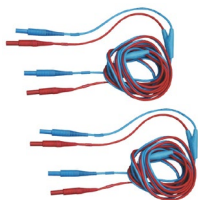
insulation type according to EN 61010-1	double	
measurement category acc. to EN 61010-2-030	III 600 V	
ingress protection according to EN 60529	with closed housing	IP67
	with open housing, powered from the battery pack, installed plugs	IP54
	with open housing, powered from mains and/or without plugs	P40
protection against external voltage	up to 600 V AC for 10 s	
power supply to battery charger	90 V...265 V 50 Hz...60 Hz 2 A	
battery charging time	approximately 3.5 hours	
number of measurements (of resistive objects) with 10 A current performed when powered from the battery pack	700...800 depending on the ambient temperature	
maximum wire resistance for 10 A current	300 mΩ	
time of performing the resistance measurement	with selected resistive object type and bidirectional current flow	3 s
	with selected inductive object type, dependent on the resistance and inductance of the object	5 s or more
dimensions	318 x 257 x 152 mm	
meter weight	approx. 3.5 kg	
operating temperature	-10°C...+50°C	
charger operating temperature	0°C...+45°C	
storage temperature	-20°C...+60°C	
humidity	20%...90%	
reference temperature	+23°C ± 2°C	
reference humidity	40%...60%	
altitude (above sea level)	<2000 m	
temperature coefficient	±0.01% of d.v./°C ± 0.1 digit/°C	
time to AUTO-OFF	5...45 minutes or option not active, depending on the setting	
TFT graphic display	800 x 480 pixels	
interface standard	USB	
quality standard	design and manufacturing are ISO 9001 compliant	
the product meets the EMC requirements (emission for industrial environment) according to	EN 61326-1 and EN 61326-2-2	
compliance with FCC Rules	Class A digital device	

"d.v." - displayed value

Standard accessories



Kelvin crocodile (2 pcs)
WAKROKEL06



3 m double-wire test lead
U1/I1
WAPRZ003DZBBU111
U2/I2
WAPRZ003DZBBU212



L-11 carrying case
WAFUTL11



Li-Ion rechargeable battery 7.2 V
WAAKU27



Mains cable - IEC C13 plug
WAPRZ1X8BLIEC



Calibration certificate
LSWGBMMR640



USB cable
WAPRZUSB

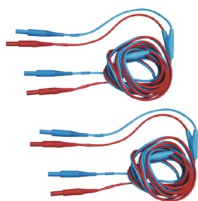


Sonel Reader PC software
WAPROREADER

Additional accessories



Double pin Kelvin probe (2 pcs.)
WASONKEL20GB



10 m / 15 m double-wire test lead
U1/I1
WAPRZ010DZBBU111
WAPRZ015DZBBU111
U2/I2
WAPRZ010DZBBU212
WAPRZ015DZBBU212



Kelvin clamp with cables
WAZACKEL1

