



## 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

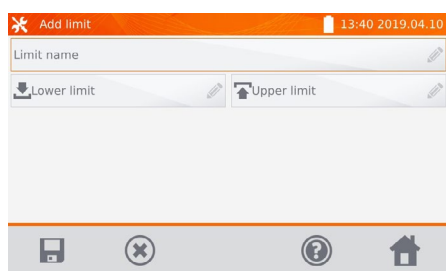
The MMR-640 meter provides an innovative combination of a high-performance measuring device with a modern user interface and advanced data management system.

## Durable and practical casing

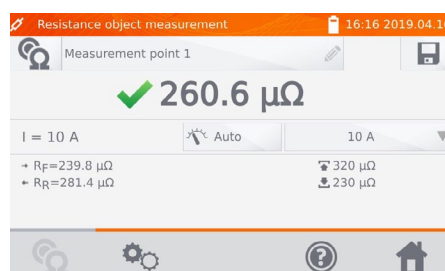
In response to the customers needs the MMR-640 has been designed to operate in difficult environmental conditions. A unique casing with the IP67 ingress protection rating ensures that the device is both waterproof and dustproof.

## Easy readout

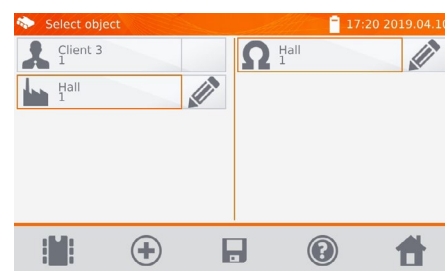
The MMR-640 meter is equipped with a readable colour touchscreen that, due to its 800 x 480 pixel resolution, provides both high comfort of interacting with the interface and high readability of the measurement results.



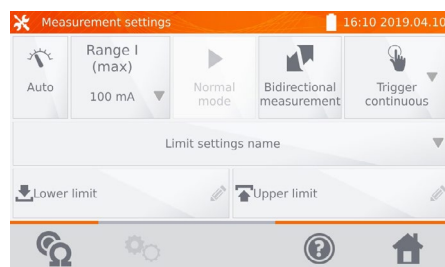
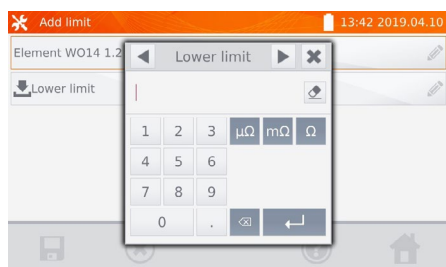
Possibility of setting limits



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	

ORANGE GREEN INSTRUMENTS CO., LTD.  
02-019-3197, 083-231-4979 www.OGI-THAI.com

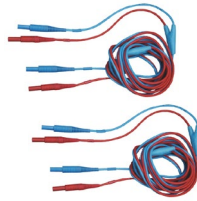
# Technical specification

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

## Standard accessories



**Kelvin crocodile (2 pcs)**  
WAKROKEL06



**3 m double-wire test lead**  
U1/I1  
WAPRZ003DZBBU1I1  
U2/I2  
WAPRZ003DZBBU2I2



**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

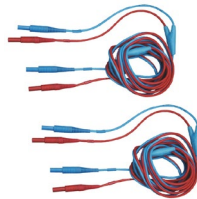


**Sonel Reader PC software**  
WAPROREADER

## Additional accessories



**Double pin Kelvin probe (2 pcs.)**  
WASONKEL20GB



**10 m / 15 m double-wire test lead**  
U1/I1  
WAPRZ010DZBBU1I1  
WAPRZ015DZBBU1I1  
U2/I2  
WAPRZ010DZBBU2I2  
WAPRZ015DZBBU2I2



**Kelvin clamp with cables**  
WAZACKEL1

