Low Resistance Meter

MMR-640

index: WMGBMMR640

TOUCH SCREEN

IP67
closed housing

IP54
open housing

CAT III
600 V

CAT IV
300 V

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

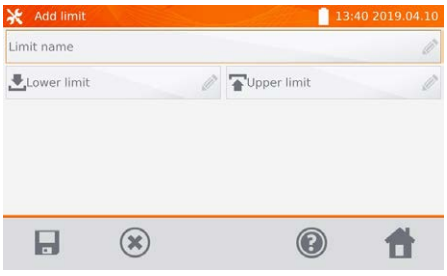
The MMR-640 meter provides an innovative combination of a high-performance measuring device with a modern user interface and advanced data management system.

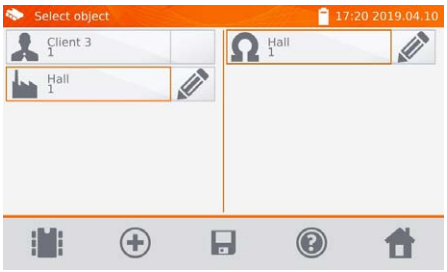
Durable and practical casing

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.

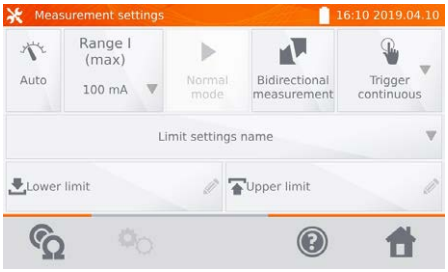
Easy readout

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	0.1 A	
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		ca. 3.5 h
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 12.5" x10.1" x 6.0"
meter weight		ca. 3.5 kg ca. 7.7 lbs
operating temperature		-10°C...+50°C 14°F...122°F
charger operating temperature		0°C...45°C 32°F...113°F
storage temperature		-20°C...+60°C -4°F...+140°F
humidity		20%...90%
reference temperature		23°C ± 2°C 73.4°F ± 3.6°F
reference humidity		40%...60%
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)

WAKROKELK06

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

USB cable

WAPRZUSB

Mains cable - IEC C13 plug

WAPRZ1X8BLIEC

Factory calibration certificate

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

Calibration certificate with accreditation