

## Applicable Regulations and Standards

IEC 61010-1 DIN EN 61010-1 VDE 0411 Part 1	Safety requirements for electrical equipment for measurement, control and laboratory use Part 1: General requirements
EN 61557-1 / -4 / VDE 0413 Part 4	Ohmmeters
EN 60529 VDE 0470-1	Test instruments and test procedures Protection provided by enclosures (IP code)
DIN EN 61326-1 VDE 0843-20-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements

## Characteristic Values

Measuring ranges	10 $\Omega$ (Lo- $\Omega$ ) 100, 2000 $\Omega$ 20, 200, 2000 k $\Omega$	Auflösung: 0,01 $\Omega$ Auflösung: 0,1 ... 1 $\Omega$ Auflösung: 0,01 ... 1 k $\Omega$
Accuracy	$\pm(1.5\% \text{ rdg.} + 4 \text{ digits})$ at 20 °C	
Measuring current	10 $\Omega$ (Lo- $\Omega$ )-range: 100 $\Omega$ -Bereich: further ranges:	200 mA 20 mA 1 $\mu$ A ... 20 mA
Open-circuit voltage	> 4 V	

## Display

Digital display	LCD, 10 mm high, 3½ places, with background illumination
Overflow indication	by <i>OL</i>
Battery status	indicated by 2 segments on the LCD
External voltage display	for voltages as from approx. 15 V: Alternately, red LED <b>VOLT</b> blinks and symbol – <i>U</i> – appears on the LCD. Numerical display of voltage level, in the case of AC voltage, symbol ~ for AC is additionally shown. Between 15 V and 400 V an intermittent acoustic signal sounds as a warning signal

## Ambient Conditions

Reference temp.	20 °C
Storage temperature	-10 °C ... +70 °C
Operating temp.	-10 °C ... +50 °C

## Power Supply

Battery	9 volt block battery per IEC 6 LR 61 AIMn, automatic shutdown after 20 seconds of inactivity
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### Battery Saving Circuit

The measuring instrument is switched off automatically if none of the keys are activated for a period of approximately 20 seconds.

## Electrical Safety

Safety class	II per IEC 61010-1
Test voltage	3.2 kV
Measuring category	CAT II 600 V, CAT III 300 V
Overvoltage protection	reversible by means of semiconductor at nominal voltages of up to 400 V, from 400 to 500 V with special fuse (can only be replaced at the factory)

## Electromagnetic Compatibility (EMC)

Interference emission	EN 61326-1:2006 class B
interference immunity	EN 61326-1:2006

## Mechanical Design

Housing	impact resistant ABS with unbreakable display cover
Protection	housing: IP 65
Dimensions	60 x 230 x 40 mm
Weight	180 g (including battery)

## Standard Equipment

- 1 **METRA OHM 413** low-resistance ohmmeter
- 1 plug-in measuring cable
- 1 9 volt block battery per IEC 6 LR61
- 1 operating instructions