

## Typical applications

- busbars, wires and cables
- quality of soldered and welded joints
- motor and transformer winding
- switch contacts
- electrical plug-in connectors
- heating elements
- all other tasks, which require the measurement of very low resistances.

## Shipment

- MicroOhmMeter LoRe, mobile or laboratory type (including instruction manual)
- feeding cables (red and black, each approx. 5 m)
- 2 test probes (including test tip extensions and connection cables)
- high-quality aluminum carrying case (for MicroOhmMeter LoRe and all accessories)



## Options

- USB interface (output of measured values)
- measurement range extension to 1,5  $\Omega$
- calibration certificate

## Distribution:

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**WiE** Werk für  
industrielle  
Elektronik

measuring instrument for accurate  
determination of very low resistances  
in the range of n $\Omega$ -m $\Omega$

high measurement current – up to 90 A  
low weight – approx. 3 kg  
portable – battery operation



mobile version available



**WiE** Werk für  
industrielle  
Elektronik

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MIKRO $\Omega$ METER  
LoRe



Whats the use of the MicroOhmMeter LoRe?

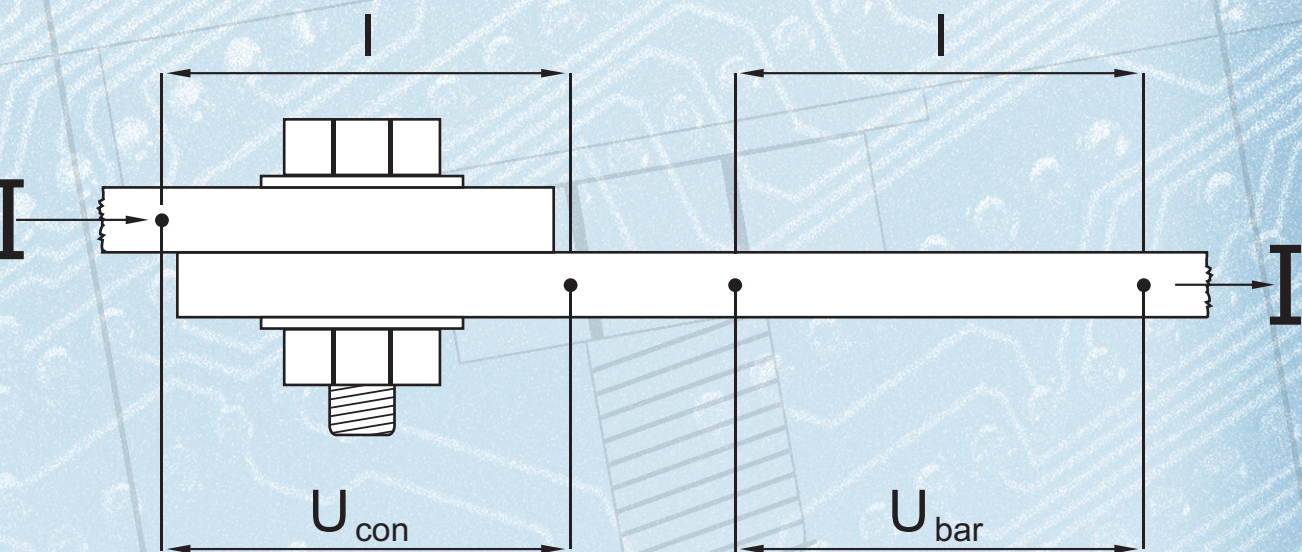
The security of supply of our electric energy facilities depends essentially on the proper condition of the electrical connections. Due to suboptimal conditions, (residual) lifetime may be reduced and the amount of maintenance increases heavily.

To evaluate those conditions, correct measurement of very low resistances with maximum accuracy is necessary.

The MicroOhmMeter LoRe has been especially developed for such tasks. This portable, mains current independent device makes it easy to measure resistances, from nΩ to mΩ, with great precision. According to the measured value the performance factor can be calculated immediately.

The performance factor  $k_U$

To evaluate the condition of the connection its performance factor  $k_U$  is calculated and evaluated. It is calculated by the ratio between the resistance of the connection, measured over a specific length,  $R_{con}$ , and the resistance of the busbar, measured over the same length,  $R_{bar}$ . For long-lasting, stable connections the performance factor  $k_U$  has to be  $\leq 1,5$ .



$$k_U = \frac{R_{con}}{R_{bar}} = \frac{U_{con}}{U_{bar}} = \frac{P_{con}}{P_{bar}}$$

Laboratory type



Mobile type



Operational conditions

IP rating	IP 21	IP 67 (when case is closed)
temperature range	-10 °C to 40 °C / 14 °F to 104 °F	

Technical specifications

metering range	10 nΩ ... 500 mΩ (optionally up to 1,5 Ω)	
metering resolution	1 nΩ	
metering range selection	automatic	
measurement current	up to 90 A DC (depends on the measured objekt)	
display	2,7" OLED display, resolution 128x64 pixels, 180° angle of view, four-digit measured value	

Dimensions

microohmmeter (HxWxD)	85 mm x 250 mm x 260 mm (without carrying handle)	430 mm x 341 mm x 244 mm
carrying case (HxWxD)	190 mm x 500 mm x 450 mm	-

Weight

without accessories	approx. 3 kg	approx. 5.5 kg
with accessories and carrying case	approx. 9 kg	approx. 11.5 kg

Transport

convenient carrying handle, which is also used as a stand

weatherproof trolley case with telescopic handle

