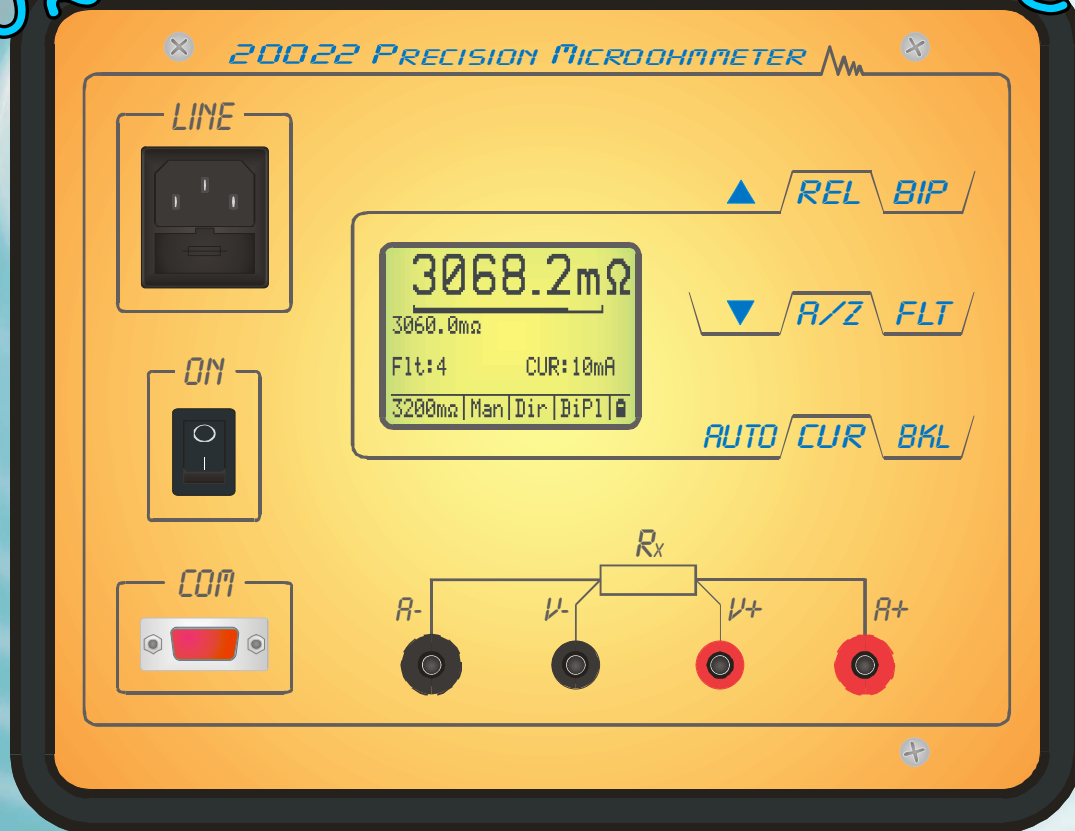


# 20022 Microohmmeter



32000 points

320Ω – 100nΩ

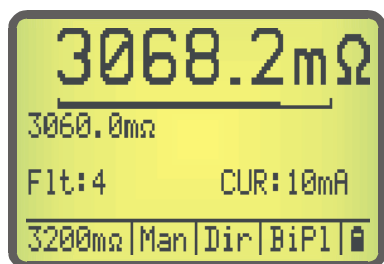
20022 microohmmeter is specifically designed for field use as it features a sturdy plastic container completely sealed and can operate on battery (which comes standard) allowing for lots of autonomy. The extremely small dimensions (a volume has halved compared to its predecessor), the accuracy, measurement points, functionality and portability which offers make this unit unique. Can measure resistive elements ranging from 320 Ohm to 100 nOhm, even in the presence of inductive components such in large transformers with high and medium voltage.

- ▶ 32000 measuring points / 5 measurements per second
- ▶ 6 ranges from 320 Ohm to 3200 uOhm (from 10 mOhm to 100 nOhm of resolution)
- ▶ current measurement can be selected
- ▶ choice of automatic or manual range measurement
- ▶ graphic display
- ▶ bar graph
- ▶ relative measure both absolute and percentage simultaneously of the principal measurement
- ▶ automatic measurement in both polarities indicating the average value
- ▶ auto-zero the instrument
- ▶ compensation of test leads
- ▶ choice and display the magnitude of the filtering of the measure
- ▶ backlight on/off
- ▶ acoustic signaling of the correct selection
- ▶ line and battery standard operation
- ▶ indication of the state of battery charge
- ▶ reading data and setting via optocoupled USB
- ▶ only two commands: one to read all the data and set-up and one to write the new setup

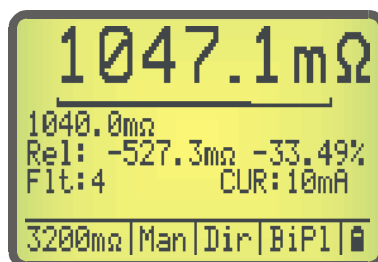
The instrument has a number of measuring points and a resolution that they are not in any similar product, even in the predecessor of 2012 which has improved the number of measurement points going from 20000 to 32000, and in which halved the size and reduced the weight by 40%. Also increased measurement speed and stability through an analog-digital converter of last generation.

Allows measuring absolute and relative percentage, the measure bipolar automatic, setting a filter to improve the stability of the measure when it is done with the current low is reached where a feeling of tension in 100nV, the choice between two current measurement.

As seen in the pictures below all relevant information is always displayed in the 2.8-inch display, together with an indication of the range, status of Auto / Manual, Direct / Reverse measurement, Bipolar measurement, state of battery charge.



Principal measure on 3200mΩ range, in bipolar measurement mode. Filter = 4.



Principal measure + relative absolute and percentage measures. High measurement current.

## TECHNICAL DATA

<b>Power supply</b>	line and battery standard supply
<b>Power requirement</b>	15VA
<b>Battery autonomy</b>	from 1 hour to 350 hours depending on the selected range and the state of the backlight
<b>Representation</b>	on backlighted graphic display 64x128 pixel 62x44mm
<b>Point of measure</b>	32000
<b>Display refresh rate</b>	5 Hz
<b>Range</b>	3200,0μΩ, 32,000mΩ, 320,00mΩ, 3200,0mΩ, 32,000Ω, 320,00Ω
<b>Range selection</b>	automatic / manual
<b>Resolution</b>	100nΩ, 1μΩ, 10μΩ, 100μΩ, 1mΩ, 10mΩ
<b>Measurement accuracy</b> (range 320Ω ÷ 3200μΩ high current)	±(0,05% + 0,001%/°C + 2 digit)
<b>Measurement accuracy</b> (range 320Ω ÷ 3200μΩ low current)	±(0,06% + 0,001%/°C + 3 digit)
<b>Measure current</b>	10A, 1A, 100mA, 10mA, 1mA, 100μA, 10μA
<b>Compensation power cable / Reset</b>	yes
<b>Other measures</b>	measure absolute and percentage
<b>Filter</b>	average on 1, 2, 4, 8, 16, 32, 64 measures
<b>Max inductive value</b>	35 Henry / 150 ohm
<b>Optocoupled USB connection</b>	with optional USB converter
<b>Weight</b>	4850 gr. approximately
<b>Dimension</b>	265x245x170mm (W x H x D)