

# MR12-SPX

To measure the contact resistance of carbon strips of current collectors used by trains, electric trams and trolley buses

$\mu$ -Ohmmeter

with easy to handle probe



The MR12-SPX and its measuring probe are used for inspection and quality control of carbon strips of current collectors used by electrical powered trains, electric trams, trolley buses and similar vehicles. Here the current collectors are preferably roof mounted. Due to the often pairwise mounting of the carbon strips, there is little space between the lowered collectors. Therefore the measuring probe itself is very small. The design can be modified for your needs.

The measured variable is the electrical resistance in  $\mu\Omega$  or  $m\Omega$  between the aluminum fixing rail (bottom) and the conducting carbon layer (top). The measured resistance changes due to wearing of the carbon strip or not correct (conductive) bonding of carbon layer and fixing rail. Overload, incorrect bonding or other overstraining can cause separation or failure of the adhesive bonding.

Through the measuring principle and the special contacting the MR12-SPX can achieve accurate and reproducible results, even if the aluminum fixing rail is very dirty due to heavy wearing and flying sparks.

The equipment is battery powered and has a shoulder strap for easy carrying. The measurement values are internally stored and can later on be transferred to a PC.

## Technical Specifications:

Automatic Ranges:	1 $m\Omega$ , 10 $m\Omega$
Resolution:	1 $\mu\Omega$ @ 1 $m\Omega$ 10 $\mu\Omega$ @ 10 $m\Omega$
Max error:	$\pm 0.1\%$ of range, $\pm 1$ digit
Maximal resistance:	18 $m\Omega$ (80 % over range @ 10 $m\Omega$ )
Measuring current:	1 ADC
Resistance control:	with external reference resistor
Interfaces:	RS232C for accessing the internal stored test results (2000 values)
Power supply external:	100 - 240 VAC
Power supply internal:	Battery with 2950mAh
Weight MR12-SPX:	3.3 kg
Dimensions MR12-SPX:	260 x 100 x 310 mm (WxHxD)
Weight Probe:	0.8 kg
Dimensions Probe:	76 x 130 x 102 mm (WxHxD)

## Contact us for more information:

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