TiePie TP-MM3000 4 Channel Differential Input Automotive USB User Manual

Contents

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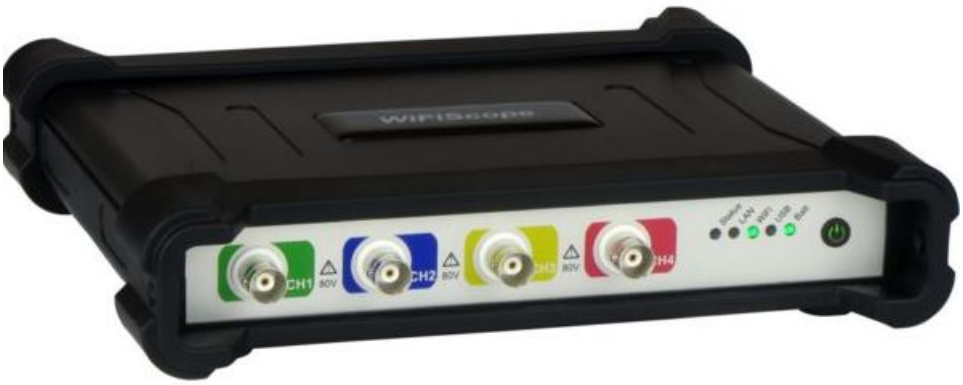
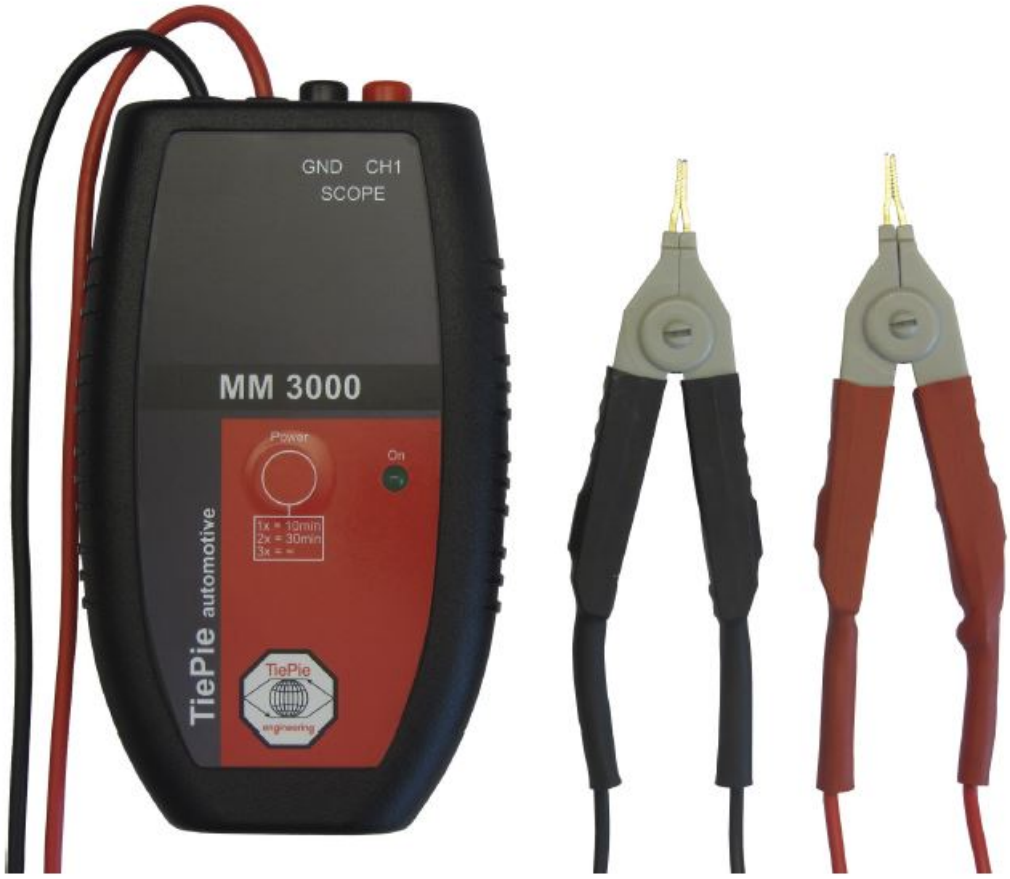


Milliohm Meter TP-MM3000

Introduction

The Milliohm Meter TP-MM3000 is a device used to measure resistance in automotive circuits. It has an input range of 0-2.5 and an accuracy of 1%. The output ratio is 1 m = 1 mV and the output voltage varies depending on the resistance measured, with a maximum of 2.65 V. The device comes with kelvin clips on 85 cm leads and 4 mm banana sockets. It operates at an operating temperature of 25 C and requires a 9 V PP3 battery for power.



Operating Instructions

1. Connect your Automotive Test Scope to the computer and start the measurement software.
2. Set the scope input range to 4 V and select the TP-MM3000 probe for the scope input.
3. Press the Power button (see Power button for more information.)
4. Connect a TP-C1812B differential measuring lead to an input of the Automotive Test Scope.
5. Connect the red and black banana plugs of the TP-C1812B differential measuring lead to the corresponding sockets of the SCOPE output of the Milliohm Meter TP-MM3000.
6. Connect the kelvin clips to the component of which the resistance needs to be measured.

When measuring an in-circuit resistance, make sure to remove the power from the circuit first, to avoid damaging the Milliohm Meter TP-MM3000.

Power button

The Power button of the Milliohm Meter TP-MM3000 has three auto power-off settings. The device can always be switched off by pressing the Power button when the instrument is powered on.

- **Pressed 1 time:** the Milliohm Meter TP-MM3000 is switched off after 10 minutes.
- **Pressed 2 times:** the Milliohm Meter TP-MM3000 is switched off after 30 minutes.
- **Pressed 3 times:** the Milliohm Meter TP-MM3000 is never switched off.

The Milliohm Meter TP-MM3000 can always be switched off by pressing the Power button when the instrument is powered on.

Battery

When the battery capacity is no longer adequate, the power LED will start to blink. Replacing the battery is recommended to keep resistance measurements accurate.

Specifications

Input range	0 Ω - 2.5 Ω
Accuracy	1 %
Output ratio	1 mΩ = 1 mV
Output voltage	Depending on resistance measured, 0 V to 2.65 V max
Connections	
Input	Kelvin clips on 85 cm leads
Output	4 mm banana sockets

Operating temperature	25 °C
Dimensions	
Length	145 mm excluding leads
Width	85 mm
Thickness	25 mm
Weight	235 g including battery
Oil resistant	Yes
Power	9 V PP3 battery

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Documents / Resources

	**TiePie TP-MM3000 4 Channel Differential Input Automotive USB** [pdf] User Manual TP-MM3000 4 Channel Differential Input Automotive USB, TP-MM3000, 4 Channel Differential Input Automotive USB, Differential Input Automotive USB, Automotive USB

References

- **TiePie - USB oscilloscopes, spectrum analyzers, data loggers, multimeters, Arbitrary Waveform Generators**