



## LR 2045-S

### Micro Ohm Meter



The Motwane LR 2045-S capable of measuring low resistance with 1 micro-ohm resolution. It employs the proven 4-wire (4W) measurement where fixed DC current is supplied to DUT and voltage drop across the DUT is measured and displayed as proportional resistance reading. The meter is able to deliver guaranteed stable readings on inductive as well as resistive loads.

## Features

- ✓ Back-EMF Protection
- ✓ Best Measurement **Accuracy of 0.05% ± 5 dgt**
- ✓ **Resolution 1  $\mu\Omega$  on 20 m $\Omega$  range**
- ✓ Inbuilt Thermal Paper Printer
- ✓ Temperature Measurement & Temperature Correction Feature.
- 4.3" Colour TFT Digit Large And Clear Display
- ✓ Accurate & Stable Readings
- ✓ Pc Interfacing With Software
- ✓ 4 Wire Measurement Method
- ✓ Sealed Soft Touch Membrane Keypad
- ✓ Bluetooth Interface And Cloud Connectivity Through Motware App

## Applications

- Hot & Cold Winding Resistance Measurement of Motors, Generators, Alternators, and Transformers.
- Contact Resistance Measurement of Fuses and Miniature Circuit Breakers.
- Resistance Measurement of Cables & Wires.

## Technical Details

### LR 2045-S

#### Technical Specification

Display	4.3" Color TFT with backlit
Temperature correction	Range 0 to 100 deg, Accuracy + 1 deg, Resolution 0.1deg.
Temperature Channel	1
Printer	Built in Thermal Printer
PC Interface	USB
Report Storage	1000 Reports

#### Indications

- 4.3" Color TFT with backlit or range and  $\Omega$ /m $\Omega$  indications.
- LED indication for operation and pulse mode.
- Over range indication: Blinking zero display.
- Under Range Indication: All Display shows zero. (Not blinking)

#### Technical Specifications :

Range	Resolution	MAX CURRENT	ACCURACY $\pm$ (%RDG + DIGITS)
20m $\Omega$	1 $\mu\Omega$	1 A	$\pm$ 0.05 % of reading $\pm$ 5 digits
200m $\Omega$	10 $\mu\Omega$	1 A	$\pm$ 0.05 % of reading $\pm$ 5 digits
2000m $\Omega$	100 $\mu\Omega$	100mA	$\pm$ 0.05 % of reading $\pm$ 5 digits
20 $\Omega$	1m $\Omega$	10mA	$\pm$ 0.05 % of reading $\pm$ 5 digits
200 $\Omega$	10m $\Omega$	1mA	$\pm$ 0.05 % of reading $\pm$ 5 digits
2000 $\Omega$	100m $\Omega$	100uA	$\pm$ 0.05 % of reading $\pm$ 5 digits

**Note :** Accuracies are valid from 1/10th of the range to FS of range & valid

**Temperature** 25°C  $\pm$  3°C at 55%  $\pm$  10%RH.

**Temperature Coefficient** 100ppm/°C.

**Open Circuit Voltage** 15Volt  $\pm$  3volt.

**Power Supply** Mains Input Voltage 115/230VAC,  
50/60Hz

#### Environmental Specifications:

Operating Temperature	0°C-55°C.
Storage Temperature	-10°C to 60°C.
Relative Humidity	95 % RH at 40°C max. (Non Condensing)

**Notes :** 1. The Instrument is accompanied with Test & Calibration sheet. 2. Test Facilities can be provided at the factory with the available test set-ups only. 3. The company's policy includes continuous improvement of its product. We, therefore, reserve the right of any deviation from illustration or specifications without notice. 4. Stated accuracies are valid from 10% of the range to 95% of the range. 5. Accuracy specified for temperature range of 25°C  $\pm$  5°C & 55% RH  $\pm$  10%.

#### Safety

Measurement Category: CAT II (1000V)/CAT III (600V)  
Reinforced insulation  
Relevant Standard Specifications: Safety According to  
EN 61010-1, EMC According to EN 61326-1

#### Protection

Protection against EMF : 12KV-(1.2/50Q sec.pulse).  
Instrument Protected against mains overload  
(Fuse 250mA)  
All ranges are fuse protected. (Input fuse 1A).

#### Physical Specifications:

Dimensions : 368 mm (L) X 283 mm (W) X 188 mm (H)  
Net Weight : 6.0kg (Approx)

#### Accessories

##### Standard

■ Test Lead Set 2 Meter	: 1 Set.
■ Mains Power Cord	: 1 No.
■ Fuse - 500mA 250V Slow Blow	: 1 No.
■ Fuse - 1.5A 250V Quick Blow	: 1 No.
■ Thermal Paper roll	: 1 No.
■ Instruction Manual	: 1 No.
■ Calibration Certificate	: 1 No.
■ USB Cable	: 1 No.
■ Temperature Measurement Probe	: 1 No.
■ Pen Drive with Software	: 1 No.

##### Note :

- Bluetooth Software (Optional)
- Motware Desktop Application (Optional)

**Note :** To learn more about the Motware Application, check **Page 46**

#### ORDERING INFORMATION

Product	Order Code
<b>LR2045-S</b> <b>with Standard Accessories</b>	<b>109290010</b>