

# PORTABLE 100 AMP DIGITAL MICROHMMETER MODEL MRM-100

## DESCRIPTION

PHENIX Technologies' MRM-100 Microhmmeter is used in circuit breaker contact resistance measurement tests, or anywhere low resistance measurements at currents up to just over 100A are required. The MRM-100 measures resistance in the range from 1 micro-ohm to 240 milliohms. The MRM-100 uses the four-wire Kelvin method and true DC current to perform its measurements. The use of microprocessor technology assures the highest accuracy and reliability. The MRM comes equipped with a built in printer, which allows immediate test report generation. It also has the ability to store and later download the results to MRM-Windows software. The MRM-Windows software allows generation of test reports and the ability to save and recall previous test results. The MRM-100 comes equipped with a rugged case for easy transportation.

## DESIGN & SAFETY FEATURES

- Microprocessor Based—Allows for user interface to easily program, read, store, and print tests.
- Wide Range of Measurements—Allows user to vary test current from 10 Amps to 105 Amps and measure 1 micro-ohm to 240 milliohms.
- Ability to store and print up to 300 Readings—User can print (using a 2.25 inch impact printer) or output readings via an RS-232 interface (USB adapter is optional).
- Full Keypad—Allows easy entry of test descriptions and parameters
- Highly Accurate—Gives user the confidence to trust test results are true.
- MRM-100 has CE certification.
- Output Lead Length 30' (9m).
- Input Cable 6' (2m).
- USB interface converter available.
- Battery-backed RAM to store readings; has 10-year life.
- Rugged carrying case.
- Four line by 20 character backlit LCD.



## TECHNICAL SPECIFICATIONS

### Resistance Measurement Range:

1  $\mu\Omega$  to 240m $\Omega$ , non-inductive.

### Test Current:

10 to 105 Amps, selectable in 1 Amp steps.

### Uncertainty:

+/- 1% of reading, +/- 0.4  $\mu\Omega$  at 100 Amps.

### Resolution:

|                                       |                 |
|---------------------------------------|-----------------|
| 1 $\mu\Omega$ to 199 $\mu\Omega$ :    | 0.1 $\mu\Omega$ |
| 200 $\mu\Omega$ to 1999 $\mu\Omega$ : | 1.0 $\mu\Omega$ |
| 2.00m $\Omega$ to 19.99m $\Omega$ :   | 0.01m $\Omega$  |
| 20.0m $\Omega$ to 240.0m $\Omega$ :   | 0.1m $\Omega$   |

### Keyboard:

10 number keys, 26 letter keys, and 14 function keys.

### Environment:

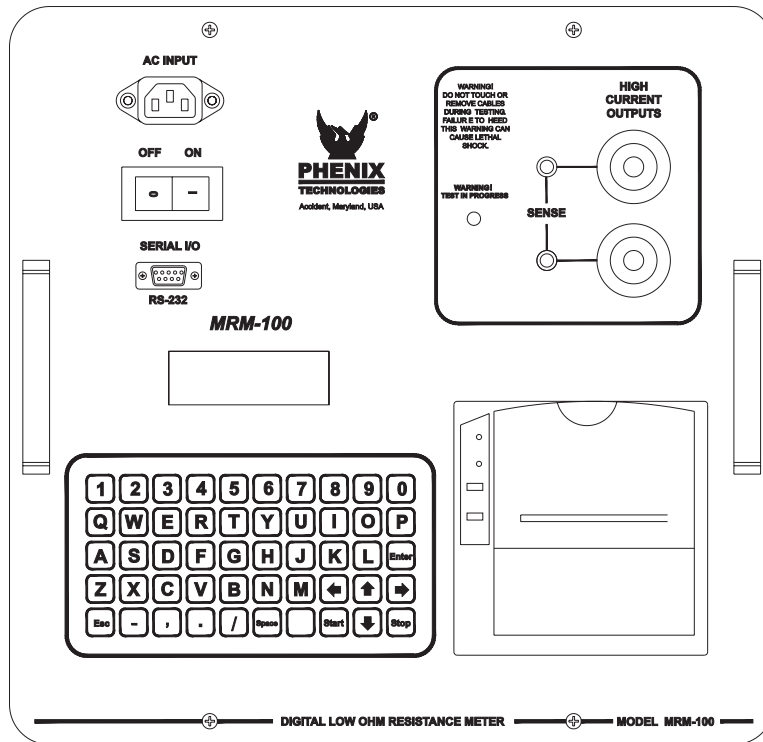
Operating: -7 to 45 degrees C (19 to 113 degrees F).  
Storage: -20 to 57 degrees C (-4 to 135 degrees F).  
Humidity: < 90%, non-condensing.

**Dimensions:** 16.5" (419 mm) W x 15.25" (388 mm) D x 11.25" (286 mm) H.

**Weight:** 28.5 lbs. (13 kgs).

**Input:** 100 to 240 Volts AC, 50/60 Hz, 5A.

# CONTROL PANEL LAYOUT




*Note: Due to continual development, specifications are subject to change without notice.*

## COMPANY PROFILE

PHENIX TECHNOLOGIES is a leading manufacturer of high voltage, high current, and high power test systems and components. Our test systems are in operation around the world satisfying the testing requirements of our customers.

Our 65,000 square foot headquarters is a modern manufacturing facility where all the major components of our systems are produced. All aspects of electrical and mechanical design, software design and actual production are performed in this facility and controlled by an ISO9001 quality program. Our engineers offer a unique blend of theoretical knowledge and practical experience. Our ever-expanding Service & Calibration Department stands ready to assist you during and after installation to insure years of trouble free service.

Our engineering resources, manufacturing capability and commitment to flexibility have earned us the reputation as the supplier of choice. From portable test equipment to large, cutting edge automated test systems, PHENIX Technologies provides solutions for your testing needs. You owe it to yourself to discuss your testing requirements with PHENIX Technologies today.

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