


**MRT-2050**

**MRT-1050**

## INTRODUCTION

MRT-2050 and MRT-1050 are high-performance insulation resistance testers, designed to measure the insulation resistance of electrical equipment, wiring, and insulating materials to ensure safe operation. The testers are widely used in power systems, manufacturing, and construction to detect insulation aging, moisture, or damage. They help prevent electrical hazards and are ideal for testing motors, transformers, switchgear, and cables, ensuring system reliability and long-term equipment performance. As a compact design achieves portability and easy operations, the MRT-2050 and MRT-1050 also calculate the polarization index and absorption ratio, offering multiple safety protections.

## FEATURES

- 1999 counts insulation resistance testers
- Supports 100V/250V/500V/1000V/2500V multiple test voltages
- Polarization Index (PI) and Absorption Ratio (DAR) calculation
- Supports timed measurements and has a comparison function
- Multiple safety protections: includes high voltage warning, overload protection, low battery alarm, etc., ensuring safe use
- Languages: English / Chinese



# INSULATION RESISTANCE TESTER


**2MΩ-50GΩ**

**DIELECTRIC  
ABSORPTION  
RATIO**

**AUTO  
COMPARISON  
FUNCTION**


**TECHNICAL SPECIFICATIONS**

|                       |       | MRT-2050                         |             | MRT-1050                     |             |
|-----------------------|-------|----------------------------------|-------------|------------------------------|-------------|
| Voltage Output        |       | 250V/500V/1000V/2500V (0-20%)    |             | 100V/250V/500V/1000V (0-20%) |             |
| Rated Voltage         | 100V  | /                                |             | 0.1MΩ-200MΩ                  | ±(5%+3bits) |
|                       | 250V  | 0.1MΩ-2GΩ                        | ±(5%+3bits) | 0.1MΩ-2GΩ                    | ±(5%+3bits) |
|                       | 500V  | 0.5MΩ-5GΩ                        | ±(5%+3bits) | 0.5MΩ-5GΩ                    | ±(5%+3bits) |
|                       | 1000V | 3MΩ-20GΩ                         | ±(5%+3bits) | 3MΩ-20GΩ                     | ±(5%+3bits) |
|                       | 2500V | 5MΩ-200GΩ                        | ±(5%+3bits) | /                            |             |
| DC Voltage            |       | 0-1000V Acc: ±(2%+3bits) Res: 1V |             |                              |             |
| AC Voltage            |       | 30-750V Acc: ±(2%+3bits)Res: 1V  |             |                              |             |
| Short Circuit Current |       | >1mA                             |             |                              |             |
| Overvoltage Category  |       | CAT III 600V                     |             |                              |             |
| Display Count (Max)   |       | 1999                             |             |                              |             |
| Absorption Ratio      |       | ✓                                |             |                              |             |
| Polarization Index    |       | ✓                                |             |                              |             |
| Low Battery Alarm     |       | ✓                                |             |                              |             |
| High Voltage Warning  |       | ✓                                |             |                              |             |
| Over-range Alarm      |       | ✓                                |             |                              |             |
| Overload Indicator    |       | ✓                                |             |                              |             |

**GENERAL CHARACTERISTICS**

|                            | MRT-2050                          | MRT-1050 |
|----------------------------|-----------------------------------|----------|
| <b>Product Color</b>       | Black&Blue                        |          |
| <b>Product Net Weight</b>  | 684g                              |          |
| <b>Product Size</b>        | 182*124*66mm                      |          |
| <b>Battery</b>             | 8*size 5,1.5V Dry Battery / DC12V |          |
| <b>Standard Carton</b>     | 47.5*46*34.5cm                    |          |
| <b>Carton Gross Weight</b> | 24.38kg                           |          |
| <b>Quantity Per Carton</b> | 20PCS                             |          |