

Surface Resistance Meter Instruction Manual



Standard: Q/HTY 017-2018
Version: WT311-EN-00

I. Introduction

The surface resistance can be measured by attaching two parallel electrodes of the instrument to the surface of the measured object. Thus you can determine whether the measured object is a conductor, anti-static material, or an insulator. The instrument is particularly suitable for a variety of anti-static areas.

Product specification:

Resistance measurement range	0.1x10 ³ ~1.5x10 ¹² Ω
Resistance measurement accuracy	±10%
Resistance measurement response time	1S
Temperature Measurement Range	0°C~50°C/32°F~122°F
Temperature measurement accuracy	±2°C/±3.6°F
Power	9V 6F22 battery
Size	63.6x31.x125.8mm
Weight	122g

Material resistance range:

Conductor	< 10 ⁸
Anti-static material	10 ⁸ ~ 10 ¹¹
Insulator	≥ 10 ¹²

Note: For the signal is weak when measuring surface resistance of 10¹¹ Ω or more, in order to ensure stable and reliable measurement, it is necessary to make small measurements in an environment where electromagnetic interference is small. During measurement process, ensure that no person walks within 3 meters.

II. Functions

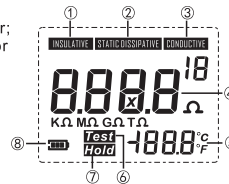
The surface resistance tester has the following functions:

- ▶ Surface resistance test;
- ▶ Three ways to simultaneously display the surface resistance or material properties;
- ▶ Environment temperature measurement;
- ▶ Temperature unit switch;
- ▶ Data holding;
- ▶ LCD backlight;
- ▶ Automatic shutdown;

III. LCD display and button functions

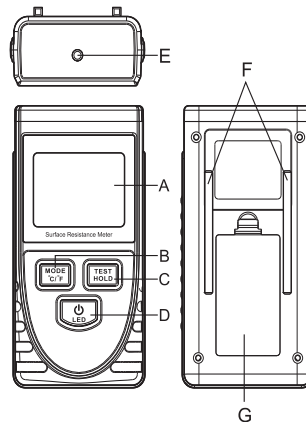
1. LCD full screen display:

- ①. Insulation material indicator;
- ②. Anti-static material indicator
- ③. Conductor indicator
- ④. Resistance value
- ⑤. Temperature value
- ⑥. Resistance measurement indicator
- ⑦. Data holding indicator
- ⑧. Battery indicator



2. Name of Parts: below

- A. LCD display
- B. Button for switching resistance display mode and temperature unit
- C. Button for resistance measurement and data holding
- D. On/off button and backlight button
- E. Ground wire jack
- F. Measurement electrode for surface resistance
- G. Battery door



IV. Operation Instruction

1. Power on:

Press "LED" button to turn on the instrument; after full screen display for about 1 s, start preparing for measurement;

2. Resistance display mode:

Short press "MODE C/F" button to switch resistance display mode: Order of magnitude mode/conventional mode;

3. Backlight:

After power on, short press "LED" button to turn on/off the backlight;

4. Temperature unit switch:

Long press "MODE C/F" button to switch temperature units between Celsius (°C) and Fahrenheit (°F);

5. Resistance measurement:

After turning on the instrument, place the instrument on the surface of measured object, press and hold "TEST HOLD" key to start measurement, and "TEST" indicator will be displayed at the same time. During measurement, resistance display area displays "----" (displayed as normal mode) or "--x--" (displayed as order of magnitude mode), indicating that the instrument is measuring. After the resistance value is measured, it will be displayed in resistance display area. When the resistance value is bigger than measurement range, resistance display area will show "HI". When the resistance value is smaller than measurement range, "Lo" will be displayed. After releasing measurement button, the measurement will finish and the data obtained will be held with "HOLD" indicator showing up;

6. Measuring resistance to ground:

Insert the ground wire into the earth jack at front end of the meter, with the other end of the ground wire being grounded; keep left electrode of the meter close to object surface to be measured, and the resistance value displayed on LCD is the value of resistance to ground. (Do not make right electrode touch the object surface at this time).

7. Shutdown:

After power on, long press "LED" button to shut down; for power saving, this instrument also has automatic shutdown function; if there is no operate within 30 seconds, the instrument will automatically shut down;

Specific Declarations:

Our company shall hold no any responsibility resulting from using output from this product as an direct or indirect evidence.

We reserves the right to modify product design and specification without notice.