

VT1000

Handheld Electrostatic Voltmeter

The VT1000 handheld surface electrostatic tester is designed to measure the static voltage on the surface of isolated conductors.

This instrument can be used in accordance with testing standards including ANSI/ESDS20.20, ANSI/ESDTR53, IEC61340-5-1, JESD625-B, GJB3007. The VT1000 is easy to use, highly reliable and can be used to measure the charge accumulation during manufacturing, transportation, and testing. It can be used in a variety of applications include engineering, maintenance, quality control, incoming material inspection, manufacturing and training, among others.

The tester is designed with a long probe, which provides flexibility and makes it suitable for the applications inaccessible for typical large and heavy handheld electrostatic testers. By changing different probes, single-point and different surface area measurements can be performed to achieve higher voltage resolution. A hand-held probe is included in its standard configuration, which can be used to test human walking voltage.



Features

- Hand-Held, Easy-To-Use Meter To Measure Voltage On Surfaces Such as Isolated Conductors
- Applications Include Engineering, Maintenances, Quality Control, Material Inspection, and Manufacturing
- Two Probes: Long, Single Point Probe, and Handheld Probe
- LCD Screen Displays Information, Hold Function Stores the Max & Min Measurement Values
- Display Data Into a Waveform Diagram with Optional Software

Applications:

The OhmMetrics® VT1000 kit tests the voltage accumulation for ESD compliance accordance with ANSI ESD20.20, IEC 61340-4-1, IEC 61340-2-3 and IEC 61340-4-5.

This document is prepared for our customers as a service, and is to the best of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing before determining that products mentioned are suitable.

OhmMetrics® VT1000

Standards:

- Meets the requirements in ANSI/ESD S20.20 for the testing of isolated conductors in ESD protected areas.
- Meets the requirements in IEC 61340-5-1 for the testing of isolated conductors in ESD protected areas.
- Meet the technical management requirements in GJB3007A-2009 for the testing of static electricity.
- Meet the anti-static area management rules in T/CEIA-1002 for the testing of isolated conductors.

Functions:

- **Power Button:** Start Up
- **Zero Calibration Button:** Zeros the meters sensor value.
- **Hold Button:** LCD screen will display the MAX value on line 1 and MIN value in 2nd line. Relevant info will be stored on meter's SD card
- **Power Supply Selection Button:** Changes the source of power—battery or charger
- **USB U-Disk Button:** Allows a connection to a computer to transfer data from meter to computer
- **USB Serial Port Button:** Connects meter to a computer via the COM port, users can configure related parameters through the optional computer software
- **Storage:** Each time the power is turned off on the meter, a TXT file is created and the users information is stored organized by date.

Measurements:

Walking Test—Human Body Voltage:

- Ground the meter via included ground cable.
- Connect the lead wire and hand probe to the meter
- Press ZERO button to reset sensor.
- Hold the hand probe and perform the walking test specified by the standard.
- Press the HOLD button and the meter will automatically store the MAX and MIN values.
- Press HOLD again to preform another test.

About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.

Specifications

Power:	DC 9V (battery or power cable)
Consumption:	0.9W
Test range	0 ~ +/-2kV
Precision:	0—30V: 1V 31-2000V: +/-5%
Display:	8 Digit LCD Screen
Resolution:	1V
Sampling Rate:	1~10 times/second
Probe:	1 x Contact Probe 1 x Handheld probe
Measurement Distance:	25mm
Data Storage:	4x10 ⁷ pcs
Working Humidity:	0% RH—95% RH
Signal Output:	USB
Dimensions:	6.6in (168mm) x 2.5in (65mm) x 1.18in (30mm)

Supplied with:

- Contact Voltmeter—VT1000
- Connecting cables
- 1 Contact Probe, 1 Hand Probe
- 2 probes Model 870 acc. to IEC 61340-4-1/2-3
- Carrying case

Measurements:

Contact Measurement

- Ground the meter via included ground cable.
- Connect the lead wire and contact probe to the meter.
- Press ZERO button to reset sensor.
- Touch the contact probe to the surface to be measured
- Press the HOLD button and the meter will automatically store the MAX and MIN values.
- Press HOLD again to preform another test.