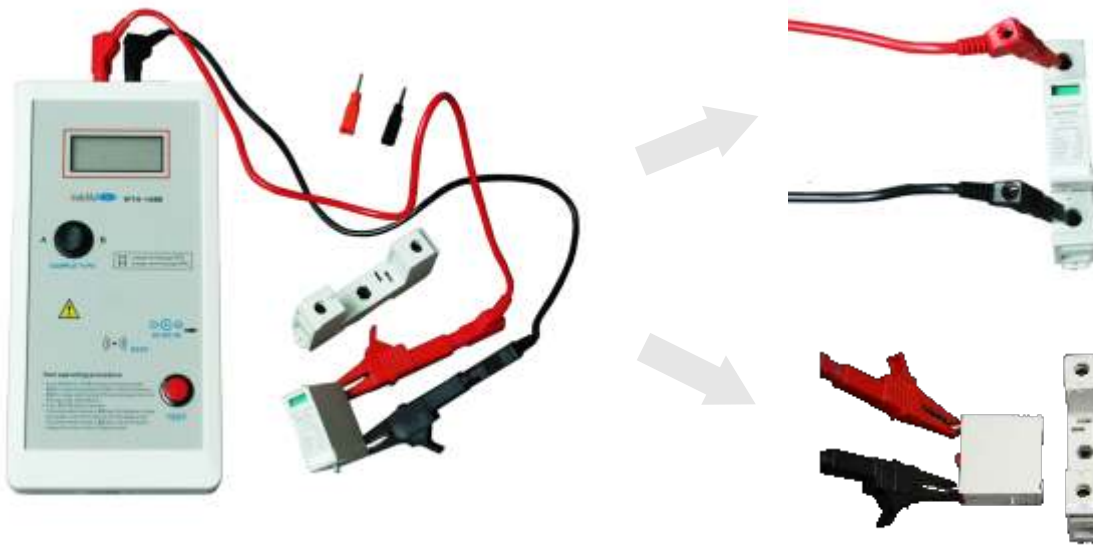


# Portable SPD Tester For WTH-108B



## Application Range

WTH-108B Portable Surge Protective Device Tester is used to test the conduct or breakdown voltage of surge protection products, (such as varistor, gas discharge tube, transient voltage suppressor, etc.) and leakage of varistor, with features of small volume, convenient carrying and wide application range.

## Main Features

1. Small volume, convenient carrying.
2. Sensitive and rapid response, accurate measurement.
3. LED display, easy distinguished.
4. DC/AC dual purpose, convenient to use.
5. Low power design, lasting and durable.

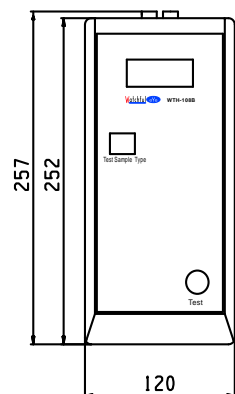
## Operation Procedure

1. Put the battery in (or connect the DC9V External Power Supplies)
2. Insert the test wires.
3. Turn the power switch on.
4. Select the sample type.
  - A. If it is the voltage limiting type: press the TEST button, the breakdown voltage and leakage current will display.
  - B. If it is the voltage switching type: press the TEST button, the breakdown voltage will display.

**Notice :** if the battery is shortage ,the test result will be unaccurate ,please replacethe battery or use the external power

1. If the battery voltage is under 5.38V, then the screen will display "LOBAT" alarm notice.
2. If the power switch on and without any operation for a while, after 45 seconds, the Tester will come into standby status, Nothing will be shown on the screen, press the TEST button, the Tester will be activated for work.

## Appearance and Dimension



## Some concepts

### 1. Voltage switching type SPD.

These have a high impedance when no surge is present, and turn into low impedance when surge voltage occurs. The frequently-used voltage switching type SPD includes spark gap, GDT, thyatron (silicon controlled rectifier) and bidirectional triode thyristor. These are also called "short-circuit type SPD".

### 2. Voltage limiting type SPD.

These have a high impedance when no surge is present but can reduce impedance continuously with increased surge current and voltage. The frequently-used nonlinear element includes: MOV, TVS.

### 3. Sparkover voltage of voltage switching SPD.

The maximum voltage between the gap electrodes, before the disruptive discharge.

### 4. Reference voltage.

also called conductive voltage, the voltage between the electrodes when the DC 1mA current passes through the MOV, which is usually marked by U1mA, some times, UN instead.

### 5. Leakage.

the current passes through the MOV, which is usually tested by 0.75U1mA. when the voltage is under reference voltage.

## Specification

General Specification	
Dimension (L x W x D)	252 x 120 x 50mm
Weight	0.75kgs (including 4 x 1.5V battery)
Case Material	ABS
Display	LCD 15mm height digit
Color	White case, Red and Black Tester Rod
Operation Temp.	0 ~40
Power Supply	4X1.5V LR6 Alkaline Battery
Storage Temp.	-10 ~50

Technical Specification			
	Range	Resolution	Accuracy
1mA DC Reference Voltage	30V -1000V	1V	2.5%±5
Breakdown voltage of gap discharge tube	30V -1000V	1V	2.5%±5
Leakage current	0.1-199.9 μA	0.1 μA	2.5%±10

Safety Parameter
Maximum Overload Current : 2mA
Maximum Output Voltage : 1200V (No load)
Case Protection Level : IP65
Calibration cycle : Once a year (Recommendation)