

PRODUCT DATASHEET

Portable tester Inspector

Inspector – portable tester at your service

The operational status of the Sheriff can be verified by a portable tester. The tester is easy to use, battery operated and handheld. The interval of testing the operational status should be according to the local conditions. The Inspector is a handheld, battery-operated tester designed to measure the clamping voltage and DC breakdown voltage of most surge protective devices.

The Inspector is a true slow-rise tester because it does not use a pulse transformer. It contains unique test circuitry and a precise 1 mA detector. As soon as 1 mA is conducted through clamping type devices such as MOVs and avalanche diodes, the control circuit removes the test voltage from the output terminals and displays the clamping voltage on the meter. A low energy capacitive circuit will discharge through crowbar type protectors such as gas tubes and carbon blocks, and trigger the detector. The breakdown voltage will be displayed and the test voltage removed.

- Rugged industrial case with handle
- Easy-to-read LCD display, simple operation
- High accuracy peak reading circuit
- Wide 10-1000 V test range
- Precise auto-sensing shutoff
- Built-in 5-pin socket for in-line resistance measurement



Operations

Internal switches for ramp speed circuit types are accessed by removing the back cover. They are to be set for the intended application: 200 V/s for laboratory tests or QC type approvals; 1000 V/s for high-speed testing or sorting. (Factory default is 1000 V/s.) Pushing the test button applies a linear ramp to the device under test. Sensing circuitry automatically terminates the test when either the DC breakdown or 1 mA clamping voltage is reached. The test value is maintained on the LCD display until the test button is released.



Electrical characteristics

Open Circuit Voltage Rate of Rise	200 V/s or 1000 V/s	
Maximum Tested Output Voltage	1000 V	
Useable Measuring Range	10–1000 V	
Test Current for Clamping Devices	1 mA±10 %	
Test Current for Crowbar Devices	>1 A	
In-line Resistance Measurement	<150 ohms (Open is >150 ohms)	
Operating Temperature	0 to +50 °C	
Storage Temperature	-10 to +60 °C	
Measurement Accuracy	0.5 %	
Power Source	2 alkaline batteries - NEMA type 1604A	
Battery Life (Based on usable reading up to 750 V)	Alkaline	Lithium
	>1,500 tests	>3,000 tests
Shipping Weight	1.36 kg	
Warranty	2 years	
Ordering Code	Inspector	

Note:

- For P-type thyristor protectors, breakdown voltage VBO occurs at the device Zener voltage VZ. Therefore, the tester will measure actual VBO.
- For N-type thyristor protectors, breakover voltage VBO is higher than the Zener voltage VZ. For these devices, the tester will measure VZ.

(*) Available only when using the 5-pin socket, TIPin to TIPout, RINGin to RINGout.

Additional Features

- Individual buttons for complete testing between all terminals and polarities
- Linear voltage ramp, selectable for 200 V/s or 1000 V/s operation
- Wide range of adapters for standard protector types

Dimensions and connections

Height	209.55 mm (8.25")
Length	165.1 mm (6.50")
Depth	88.9 mm (3.5")
Depth with Lid Open	234.95 mm (9.25")

Note:

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