

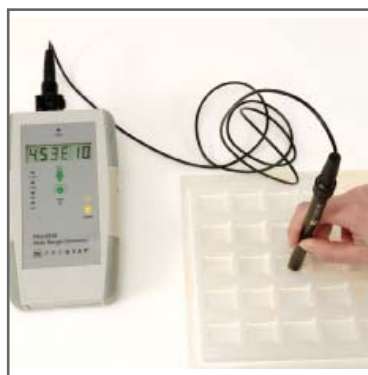
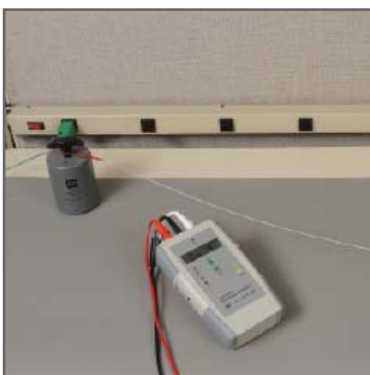


Wide Range Ohmmeter PAS-853B



Wide Range Resistance Meter Designed to Support ANSI/ESD S20.20 Program Standard.

The PAS-853B is a wide range ohmmeter designed specifically for ESD Plant Auditors who must make many measurements quickly while supporting ANSI/ESD S20.20 Program Standard and periodic verification requirements. The PAS-853B performs in accordance with standard resistance measurement practices outlined in ANSI/ESD 541 Packaging and meets all audit requirements of ESD TR53.





CONTROLS

ON/OFF Battery Bus Cut-off

Slide Switch ON SIDE OF CASE

ON: Energizes instrument and LCD displays Software Version then **GO A** with **AUTO** indication (Default)

OFF: Isolates battery and DC voltage from instrument controls and circuit. Use for transport and storage

TEST Pad

With Test Leads installed: Press once & Release. Measurements performed automatically

In conjunction with **MODE** changes from Auto operation to Continuous

MODE Pad

Steps through Auto/Voltage ranges with each press of **MODE** Pad:

- AUTO: Default automatic resistance range & Voltage control
- <10V: Manual Operation 0.01 to ≤10V Test Voltage;
- Resistance Range: 0.01E-1 to 9.99E9 Ω
- 10V: Manual Operation at 10V (Nominal, Semi-Constant)
- Resistance Range: 0.98E4 to 9.99E10 Ω
- 100V: Manual Operation at 100V (±<5V) Constant Voltage
- Resistance Range: 0.98E6 to 9.99E12 Ω

When data in **HOLD**, press **MODE** to terminate **HOLD** without changing operational mode
 - Press **MODE** with **TEST** to change from Auto to Continuous
 - Used to measure lead resistance (**NULL**)
 - Used by Prostat Authorized Technicians for Voltage Calibration

CONNECTIONS

Positive (+): Test Voltage (RED) – Supplies test voltage to electrodes/fixtures

Negative (-): Current sensing (BLACK) – Conducts current from electrode, fixtures or Ground to instrument

Chassis (⚡): Shielding connection to chassis (WHITE) – Reduces transmitted energy and effect on current measurement

Note: ¾ inch spacing between RED and BLACK accommodates dual banana BNC adapters

INDICATION

Colored LED's indicate instrument operational **MODE** and Test Voltage (YELLOW) used for the current measurement, as well as measurement completion (GREEN LED).

- AUTO: ON during automatic operations; OFF in Manual mode
- <10V:
- 10V
- 100V
- GREEN LED: Measurement hold

ACCURACY

Overall:

± <5% at ambient conditions (at 23°C and 30% Rh)

Nominal Range Tolerances:

± <5% at ambient conditions (at 23°C and 30% Rh)

0.01E-1 to 1.99E+0Ω: ±10%, ±2 Counts
 2.00E+0 to 9.99E+9Ω: ±2%, ±2 Counts
 1.00E+10 to 9.99E+10: ±5%, ±2 Counts
 1.00E+11 to 9.99E+11: ±10%, ±2 Counts
 1.00E+12 to 9.99E+12: ±20%, ±4 Counts

TEST VOLTAGES

Automatically selected and controlled in AUTO mode. May be manually selected by pressing **MODE** pad in the following order:

<10V Variable based on resistance load
 - Provides 0.001 to ≤10V
 - Functional in AUTO within range 0.01 Ω - <1.0E+4 Ω
 - Manual Operation Resistance Range: 0.01E-1 to 9.99E+9 Ω

10V Constant Voltage (Under Load)
 - Test Voltage Varies ± <5% in AUTO or Manual Operations
 - Functional in AUTO within range 1.0E+4Ω - <1.0E+6 Ω
 - Manual Operation Resistance Range: 0.9E+4 to 9.99E+10 Ω

100V Constant Voltage (Under Load)
 - Test Voltage Varies ± <2% in AUTO or

Manual Operations

- Functional in AUTO within range 1.0E+6 Ω - <1.0E+13 Ω
 - Manual Operation Resistance Range: 0.90E6 to 9.99E12 Ω
- Returns to Auto Mode

MODES OF OPERATIONS

GO A: Performs all automatic and manual voltage select functions, stops and displays measurements after Electrification Period (EP) is complete, then displays data with Green LED ON for 10 seconds.

GO C: Performs all automatic and manual voltage select functions, continuously displays measurements until the operator presses **MODE** or **TEST** pads. GO C disables electrification period controls.

POWER

One 9V alkaline transistor battery; battery life > 50 hours

DIMENSIONS

7.25 in. (184 mm) x 4.3 in. (109 mm) x 1.4 in. (36 mm)

WEIGHT

13.2 oz. (375 gram) with battery installed

ENVIRONMENT

Operating Temp: 65°F to 90°F (18°C to 32°C)
 Operating Relative Humidity: 10 to 60 %
 Operating Altitude: Under 6500 ft. (2000 m)

Prostat recommends making measurements using its instruments and fixtures in an environment of 72 – 76° Fahrenheit (22 – 24° Celsius), 25 – 35% Relative Humidity.

NOTES

¹Tolerance and accuracy measurements were conducted under controlled conditions with close tolerance reference resistors.

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