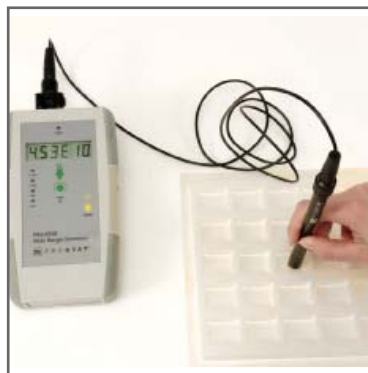
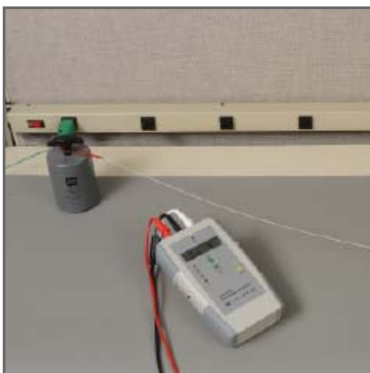


Wide Range Ohmmeter PAS-853B



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 ANSIESD 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 $\leq 10V$ 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 ($\pm <5V$) 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: $\frac{3}{4}$ 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:

$\pm <5\%$ at ambient conditions (at 23°C and 30% Rh)

Nominal Range Tolerances:

$\pm <5\%$ at ambient conditions (at 23°C and 30% Rh)

0.01E-1 to 1.99E+0 Ω : $\pm 10\%$, ± 2 Counts
2.00E+0 to 9.99E+9 Ω : $\pm 2\%$, ± 2 Counts
1.00E+10 to 9.99E+10: $\pm 5\%$, ± 2 Counts
1.00E+11 to 9.99E+11: $\pm 10\%$, ± 2 Counts
1.00E+12 to 9.99E+12: $\pm 20\%$, ± 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 $\leq 10V$
- Functional in **AUTO** within range
0.01 Ω - $<1.0E+4 \Omega$
- Manual Operation Resistance
Range: 0.01E-1 to 9.99E+9 Ω

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

100V Constant Voltage (Under Load)
- Test Voltage Varies $\pm <2\%$ in **AUTO** or

Manual Operations

- Functional in **AUTO** within range
1.0E+6 Ω - $<1.0E+13 \Omega$
- 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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