

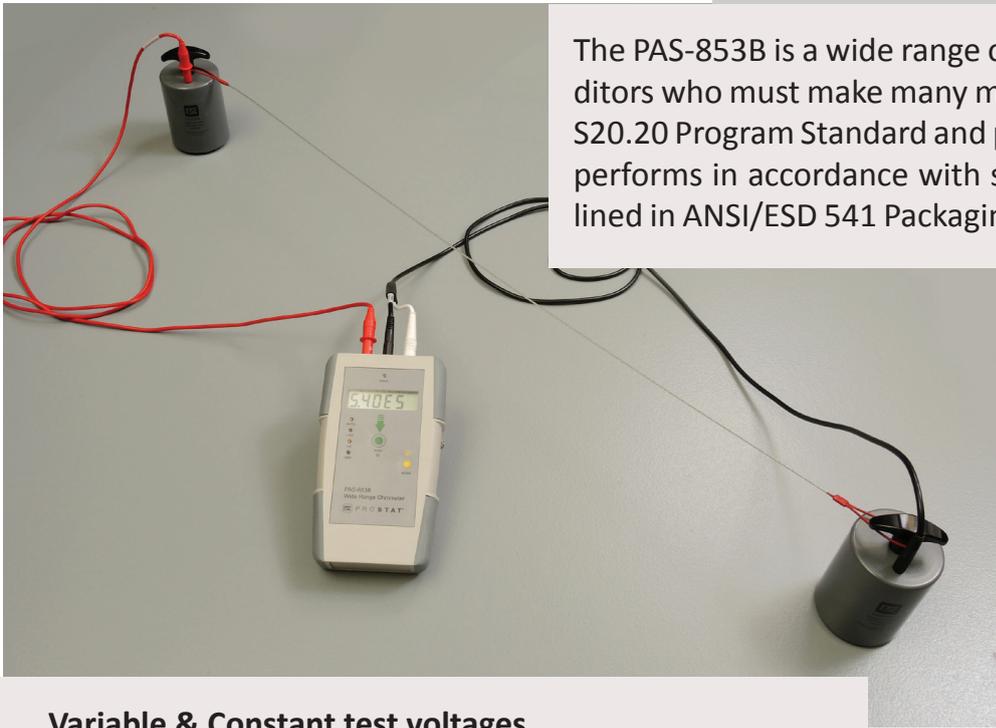
PAS-853B

Wide Range Ohmmeter



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.



Variable & Constant test voltages

- <10 Volts Variable from 0.01 to 9.9×10^3 ohms
- 10 Volts $\pm <0.5V$ ($\pm <5\%$ Constant Voltage) from 1.0×10^4 to 9.99×10^5 ohms
- 100 Volts $\pm <5V$ ($\pm <5\%$ Constant Voltage) from 1.0×10^6 to 9.99×10^{12} ohms

- Wide Resistance Measurement Range from 0.01 ohm to 9.99×10^{12} ohms
- Nominal Full Range Tolerance Averages $<\pm 5\%$
- Fully Automatic Resistance Range, Test Voltage and Electrification Period control
- Automatic or Continuous Electrification Control
- Rugged High Performance 80 inches (200cm) Test Leads
- Powered by one long lasting 9V alkaline battery
- Large, easy to read LCD Display
- Meets requirements of ESD Association Standards for material and audit resistance measurement requirements
- Certificate of Calibration Traceable to NIST included



more info at:
www.prostatcorp.com/PAS

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Toll Free in USA: +1 855-STATIC1
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Technical Data

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

TYPICAL TOLERANCES

¹Nominal performance by range:

0.01E-1 -- 1.0E 0 Ω	$\pm 10\%$, ± 2 Counts
1.0E 0 – 9.99E10 Ω	$\pm 2\%$, ± 2 Counts
1.0E11 -- 9.99E12 Ω	$\pm 10\%$, ± 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

NOTES

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

Do not attempt to open instrument case

- No internal operational parts or adjustments
- Provides access to 100DCV power supply
- Damage to instrument and environmental seals may occur
- Will void warranty
- Store instrument in case and dry environment



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