

PST-9300A RVSM AIR DATA TEST SET

“Exceeds RVSM High Accuracy Standards”



GENERAL INFORMATION: The Model PST-9300A Automated RVSM / AOA-3 Channel Air Data Test Set is a fully automated flight line three (3) channel pressure controller. It is designed to provide regulated total (PT) pressure and static (PS) pressure outputs to simulate Altitude, Airspeed, and Vertical Speed parameters. The test set can also be used in a laboratory environment to calibrate Altimeters and Airspeeds in maintenance shops or harsh hangar environments. The test set is compact, light weight, and can fit in the overhead compartment of most commercial airliners.

STANDARD FEATURES:

- Certified to perform Reduced Vertical Separations Minimum ‘RVSM’.
- AOA, Angle of Attack / 3 Channel Smart probe testing.
- Certified to perform Pitot Static FAR 91.411 and / or FAR 43 Appendix E.
- Precision microprocessor based with Honeywell sensors, accuracy to +/-0.001% of FS.
- Temperature compensation sensors for extreme flightline conditions.
- Calibration is traceable to the National Institute Standards and Technology.
- Sun-light readable color TFT handheld remote showing real instrument dial presentation.
- Profiles feature allows custom automated set points for aircraft testing or individual instruments.
- 50+ profiles can be stored in the systems tablet for line service / remote use.
- Automatic pitot and static leak rate modes perform leak rate tests.
- “Go To Ground” feature automatically and safely depressurizes Pitot & Static pressure systems to ambient conditions.



*Case meets required measurements to fit into overhead compartment in commercial airlines.
Exterior case dimensions: 22”L x 14”W x 9”H,
55.1cm L x 35.6cm W x 22.9cm H.
Weight 37 lbs., 16.78 kgs.*

- Tablet specifications include user-friendly keypad interface, full-function Touch Screen, LED function indicator, Humidity, Method 507.4 and Water, IP67 sealed against immersion, MIL-STD-810F, Method 512.4, P-1.
- Instruments are protected by a power failure feature, which in the event of an interruption to the electrical supply, causes the pneumatic system to automatically lock and allow safe depressurization to ambient ground conditions without operator assistance.
- Vacuum and Pressure pumps are self-contained with a 5,000 hour cycle to overhaul.
- Internal pressure and vacuum tanks hold pressures for quick start-ups and high performance rates.
- Smart AC power supply for safe flightline usage; input voltages 85 to 265 VAC / 47 to 420 Hz.
- Color coded hoses have self-sealing quick connections to protect aircraft from pressure loss.
- Test set is equipped with quick connect fittings, 3 (ea.) twenty ft. hoses and one twenty foot terminal cable. Additional cable lengths are available.
- Storm Case is watertight, padlockable, and made in the USA to meet applicable requirements of MIL-STD-810F and FED-STD101C.
- **2 YEAR PARTS AND LABOR WARRANTY**

Automated RVSM Pitot Static Test Set

PST-9300A Performance Specifications

Absolute Pressure Performance

Static Pressure:

Range: 0.3 to 40 inHg abs.
Accuracy: +/- 0.001 % FS
Repeatability: +/- 0.001 % FS
Drift: +/- 0.004 % FS per year max.
Overpressure: 300 % FS without damage

Pitot Pressure:

Range: 0.8 to 80 inHg abs.
Accuracy: +/- 0.001 % FS
Repeatability: +/- 0.002 % FS
Drift: +/- 0.01 % FS per year max.
Overpressure: 300 % FS without damage

Altitude Performance:

Range: -1,500 ft. to 55,000 ft.
Resolution: 1 ft.
Accuracy: ±2 ft. @ 0 ft.,
±5 ft. @ 35,000 ft.
±12 ft. @ 55,000 ft.

Angle of Attack Pressure-(3CH)

Range: 0.3 to 40 inHg abs.
Accuracy: +/- 0.001 % FS
Repeatability: +/- 0.001 % FS
Drift: +/- 0.004 % FS per year max.
Overpressure: 300 % FS without damage

Rate of Climb Performance:

Range: 100 ft./min. to 12,000 ft./min.
Resolution: 1 ft./min.
Accuracy: ±1% of VSI Rate
Static Range: 250 cubic inches max.
Pitot Range: 100 cubic inches max.

Airspeed Performance:

Range: 0 to 650 Knots
Resolution: 0.1 Knots
Accuracy: ±0.5 Knots @ 20 knots
±0.05 Knots @ 650 knots

Mach Performance:

Range: 0.0 Mach to 2.791 Mach
Resolution: 0.001 Mach
Accuracy: 0.01 Mach above 0.1 Mach
for Ps = 29.921 InHg.

Pressure Medium:

Dry Air

Pressure Connections:

Quick Disconnects (3 ea.)
Safety Seal on Female Quick Connects

Display Update Rate:

Once Every 2 Tenths per Second

Outputs:

Data Output / RS-485 / RS-485 (Option #1)

Sensors:

Honeywell Certified Sensors (NIST Traceable)
with temperature compensation

Power Requirement:

Input Range: 85 - 265 VAC
Frequency Range: 47 Thru 420 Hz

Environmental Specs:

Temp. Operating: 0° C to +50° C / 32° F to 122° F
Temp. Storage: -13° C to +60° C / -13° F to 140° F
Humidity: 0% to 95% RH20

Warranty & Calibration:

Warranty: 2 years (*parts & labor*)
Calibration: Up to 1 year (*yearly calibration suggested*)

RVSM Certification:

Calibration / Trace to NIST
Exceed RVSM Accuracy Compliance Specs

Physical Dimensions:

22" L x 14" W x 9"H

Weight

37 Lbs. 16.78 kgs.

Case

Storm Case/ Yellow
MIL-STD-810F • FED-STD-101C
• ATA 300

Accessories Include:

Protection Quick Release Fittings, Hose Kit and
Operation Manual.

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