

PST-7200A AUTOMATED AIR DATA TEST SET

"High Accuracy Standards for FAR 91.411 Certification"



GENERAL INFORMATION: The Model PST-7200A Digital Test Set is a fully automated flight line dual channel pressure controller 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 instrumentation and other test equipment. A handheld remote terminal provides the operator full control of test set function while observing Altimeters, Airspeed/Mach Indicators and Rate of Climb Indicators.

STANDARD FEATURES:

- Certified to perform Standard FAR 91.411 and FAR 43 App E.
- Precision microprocessor based with Honeywell sensors- accuracy to 0.020% of full range.
- Calibration meets or exceeds the published specifications, which are traceable to the National Institute Standards and Technology (N.I.S.T.)
- Sunlight 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 system's handheld 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.
- Handheld Remote 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.



*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 35 lbs., 15.87 kgs.*

- Instruments are protected by a power failure feature, which in the event of an interruption to the electrical supply, cause the pneumatic system to automatically lock and allow safe depressurization to ambient ground conditions automatically 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 flight line usage - input voltages 85 to 265 VAC / 47 to 420 Hz.
- Color coded hoses with self-sealing quick connections to protect aircraft from pressure loss.
- Test set is equipped with quick connect fittings, 2 (ea.) twenty ft hoses and one twenty foot terminal cable. Additional cable lengths are available.
- Water resistance and temperature compensation for extreme flight line conditions.
- 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

AIRR Engineering

Automated Pitot / Static Pitot Static Test Set

PST-7200A Performance Specifications

Absolute Pressure Performance

Static Sensor:

Range: 0.3 to 40 inHg abs.
Accuracy: ± 0.020 % FS
Repeatability: ± 0.150 % FS
Drift: ± 0.50 % FS per year max.
Overpressure: 200 % FS without damage

Pitot Sensor:

Range: 0.8 to 80 inHg abs.
Accuracy: ± 0.020 % FS
Repeatability: ± 0.150 % FS
Drift: ± 0.50 % FS per year max.
Overpressure: 200 % FS without damage

Altitude Performance:

Range: -1500 ft. to 55,000 ft.
Resolution: 1 ft.
Accuracy: ± 5 ft. @ 0 ft.
 ± 45 ft. @ 35,000 ft.
 ± 125 ft. @ 55,000 ft.

Rate of Climb Performance:

Range: 100 ft./min. to 12,000 ft./min.
Resolution: 5 ft./min.
Accuracy: $\pm 1\%$ of VSI Rate
Static Range: 250 cubic inches max
Pitot Range: 100 cubic inches max

Airspeed Performance:

Range: 0 to 60 Knots
Resolution: 0.5 Knots
Accuracy: ± 2 Knots @ 20 knots
 ± 1 Knots @ 100 knots
 ± 1.5 Knots @ 60 knots

Mach Performance:

Range: 0.0 Mach to 2.79 Mach
Resolution: 0.001 Mach
Accuracy: 0.020 Mach + 0.1 Mach
for $P_s = 29.921$ inHg.

EPR Performance:

Range: 0.1 to 3.0 (P_s @ 30inHg)
Resolution: 0.001
Accuracy: 0.15 % FS PSI

Pressure Medium:

Dry Air

Pressure Connections:

Quick Disconnects (2 ea.)
Safety Seal on Female Quick Connects

Display Update Rate:

Once Every 2 Tenths per Second

Sensors:

Honeywell Certified Sensors (NIST Traceable)

Power Requirement:

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

Environmental Specs:

Temp. Operating: 0°C to $+50^\circ\text{C}$
Temp. Storage: -25°C to $+60^\circ\text{C}$
Humidity: 0% to 95% RH

Warranty & Calibration:

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

Certification:

Calibration is Traceable to NIST
Exceed FAA Accuracy FAR 91.411 Specifications

Physical Dimensions:

22" L x 14" W x 9" H

Weight Case

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

Accessories Include: Protection Quick Release
Fittings, Hoses, Shipping Container and Operation
Manual.

REV. 03/02/2021