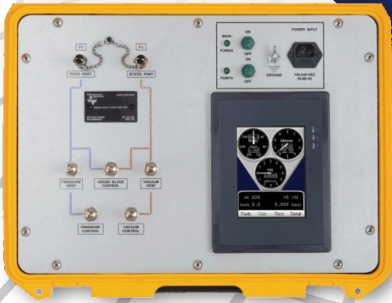


## PST-5000M DIGITAL PITOT STATIC TEST SET

*“High Accuracy, Exceeds 91.411 FAR Specs, Light Weight with Durable Sensor and Display!” Max. Altitude is 55,000 Feet.*

**GENERAL INFORMATION:** The Model PST-5000M Digital Pitot Static Test Set is a precision test set with 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 Altimeters and Airspeeds in maintenance shops or harsh hangar environments. The test set is compact, light weight, and can fit in the overhead compartment on most commercial airliners.



### STANDARD FEATURES:

- Certified to perform Pitot Static FAR 91.411 and FAR 43 Appendix E certifications on fixed or rotary wing and LSA aircraft.
- Precision microprocessor based with temperature compensated sensors, accuracy to 0.020% FS.
- No warm up time required.
- Performance: 55,000 ft of altitude, 20,000 ft/min VSI rate, and 650 knots of airspeed.
- Smart AC power supply for safe flight line usage; input voltages 85 to 265 VAC/47 to 420 Hz.
- Sun-light readable color touch screen display showing real instrument presentation. Pop-up screens display Altitude, Vertical Speed, Airspeed, and other measurements in various units of measure, including: ft, M, Kts, Km/hr, Mach, Ft/min, EPR (PT/PS), inHg, mb, and psia.
- Pitot and static leak rate modes automatically perform calculations for pass/fail conditions.
- Precision Metering valves allow fine precision control of altitude, VSI, and airspeed. Also has protection shut-off seats for lifetime use.
- Color coded hoses with self-sealing quick connections to protect aircraft from pressure loss. Comes equipped with quick connect fittings, 2 (ea.) twenty ft hoses and a 6 ft power cord.
- Internal pumps produce pressure and vacuum, and have a 5,000 hour cycle to overhaul.
- 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**



*Case meets required measurements to fit into overhead compartment in commercial airlines.  
Exterior case dimensions:  
20"L x 15"W x 7"H,  
50.8cm L x 38.1cm W x 17.8cm H.  
Weight 28 lbs., 12.7 kgs.*

# Digital Manual Pitot Static Test Set

## PST-5000M Performance Specifications

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### **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: -1,500 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 20,000 ft./min.  
Resolution: 5 ft./min.  
Accuracy: ±1% of VSI Rate

#### **Airspeed Performance:**

Range: 10 to 650 Knots  
Resolution: 0.5 Knots  
Accuracy: ±2 Knots @ 20 knots  
±1 Knots @ 100 knots  
±1.5 Knots @ 650 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:**

Silicon Sensors / Temperature Compensated

#### **Power Requirement:**

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

#### **Environmental Specs:**

Temp. Operating: 0° C to + 50° C  
Temp. Storage: -25° C to + 60° C  
Humidity: 0% to 95% RH

#### **Warranty & Calibration:**

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

#### **Certification:**

Calibration / Trace to NIST  
Accuracy exceeds FAA Regulations FAR 91.411  
Specifications

#### **Physical Dimensions:**

20" L x 15" W x 7"H Mil-STD810F

#### **Weight Case**

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

**Accessories Include:** Protection Quick Release  
Fittings, Hoses, and operation manual.

REV. 03/02/2021