
Automated ADTS w/built-in pumps & Output Switching Module (OSM)

The 6580-M1 Air Data Test Set is a rack-mount unit, with built-in pressure and vacuum pumps. It can be used to test and calibrate altimeters, airspeed / Mach indicators, Climb indicators, Flight Data Recorders, EPR indicators, Air Data Computers and Transducers. The high accuracy of this unit meets all RVSM requirements. Also, it needs to be calibrated only once a year. The use of "Profiles" makes it possible for the operator to run through a test using only a single key on the front panel keypad of this unit. The 6580-M1 can also be operated through a remote computer using the RS232 or IEEE-488 interfaces. The 6580-M1 has a built-in output switching module (OSM) with 3 Static Ports and 3 Pitot Ports on the rear panel, which can individually be controlled (opened and closed) using external inputs.

Specifications

Static Output

Pressure function

range:	0.1 to 38 inHg
resolution:	0.001 inHg
accuracy:	0.002 inHg

Altitude function

range:	-4000 ft. to 100,000 ft.
resolution:	1 foot
accuracy:	2 ft. @ 0 ft. 6 ft. @ 35,000 ft. 12 ft. @ 50,000 ft. 50 ft. @ 80,000 ft.

Climb function

range:	0 ft/min to 25,000 ft/min
resolution:	1 ft/min
accuracy:	1% of rate of climb

Pitot output

Pressure function

range:	0.1 to 60 inHg
resolution:	0.001 inHg
accuracy:	0.003 inHg

Airspeed function

range:	0 to 650 knots
resolution:	0.1 knots
accuracy:	0.5 knots @ 50 knots 0.25 knots @ 100 knots 0.1 knots above 300 knots
Airspeed rate:	0 to 500 knots/min

Mach function

range:	0.0 to 3.0 Mach
resolution:	0.001 Mach
accuracy:	0.001 above 0.2 Mach

EPR function

range:	0 to 199
resolution:	0.001
accuracy:	0.002 typ.

"Jog" and "Hold" features

Set-points can be "jogged" up or down in small increments using the arrow keys. Ramping to a set-point can be put on "hold" and controlled at the current measured value.

"Profiles" feature

A profile of the standard set-points of an altimeter check or airspeed check can be downloaded from a computer. Such a profile allows the user to operate the unit using a single key. Up to 20 such profiles can be stored in the unit.

Output Switching Module (OSM)

Contains an OSM to control output ports (3-Pitot and 3-Static), and vent solenoid-valves for auto-venting. Outputs and vents can be controlled by external inputs applied through a back-panel connector.

Pressure & Vacuum system

The unit includes separate pressure and dual-vacuum pumps for higher reliability. The pressure system includes a membrane-dryer and filter to provide clean dry air for the entire system.

Power requirement

90-260 VAC, 47-440 Hz., 200 VA

Interfaces

RS232 and IEEE-488

Dimensions & weight

4U Rack-mount design
7.0" high x 19.0" wide x 20.0" deep / 30 lbs.

Environmental specs:

Operating temp.	0° to 50°C
Storage temp.	-25° to 75°C
Humidity:	5 to 95% non-condensing

Specifications subject to change without notice
