ADTS-1555 Air Data Test Set

Perform enhanced

Calibrations on a Variety of Equipment

High Resolution

10.4" Active Matrix LCD

Easy to use, intuitive and upgradeable

Graphical User Interface

TestVonics Part Number P/N: ADC-2500



ADTS-1555 Air Data Calibrator

TestVonics ADTS-1555 Air Data Test Set Calibrator is a high accuracy air data management system. The calibrator is capable of controlling and measuring Altitude and Airspeed pressures to the highest degree of accuracy. The control and measurement range of the test system meets or exceeds most requirements for commercial and military test applications. In addition, accuracy of ADTS-1555 complies with requirements for RVSM..

Features

The ADTS-1555 features a brilliant 10.4-inch LED backlit LCD display. A 5-wire resistive touchscreen allows the calibrator to be controlled directly from the front panel. An on-screen keyboard appears automatically when operator input is needed. Additionally a USB keyboard and mouse is included with the calibrator for redundant data input if desired. The calibrator uses 2 digiquartz transducers which provide unmatched performance. Corrections are done through software requiring no mechanical adjustments and are capable of holding accuracy for a period of one (1) year.

Simple and Intuitive Interface

The ADTS-1555 software provides a familiar and intuitive graphical user interface. Modes of Operation are easily selected through tabs located along the top of the screen. The operator can easily switch between modes while testing without affecting operation. The calibrator measures and records readings, while displaying data as a table or graphically. All information is stored directly on the calibrator and reports can be printed. The ADTS-1555 can be operated remotely using the RS-232 (serial) port on the rear panel. The operating platform allows the system to be upgraded for future test applications through software upgrades, standalone installer packages or customized software applications.

Protection and Safety Features

The ADTS-1555 is designed with hardware and software features for maximum protection to the operator and unit under test (UUT). The calibrator features input pressure regulation, over-range, over-limit and over-pressurization protection. Micro-porous filters and screening prevent debris from contaminating the system. The calibrator is equipped with pressure relief valves to protect the pneumatic system components and the UUT from damage. In the event that the calibrator loses power, the manual vent can be used to safely vent both the test set and the UUT to ambient. The Test Program function allows the operator to create virtually unlimited test number of test routines for automated testing. These test routines save time and provide improved test consistency.

Measure Mode



Control Mode



Leak Test Mode



Test Program (Control) Mode



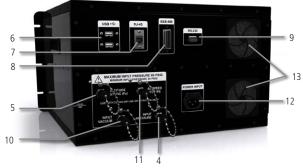
TestVonics ADTS-1555 Air Data Test Set

	Specifications
Static (Ps) Altitude Control Range ¹	-2,000 to 80,000 ft 32.148 to 0.815 inHg
Static (Ps) Altitude Measure Range	0.300 to 32.148 inHg
Altitude Accuracy	0.01% or \pm 0.003 inHg, whichever is greater
Altitude Rate ²	0 to 50,000 ft/min / 20.0 inHg/min
Altitude Resolution	1 ft / 0.01 mbar / 0.0001 inHg (Ps) / 0.01 mmHg
Altitude Units ³	feet (ft) / meters (m) / millibar (mBar) / inches mercury (inHg) millimeters mercury (mmHg) / inches water (inH20) / PSIA
Pitot (Pt) Airspeed Control Range ¹	0.00 to 1,000 kts 0.6449 to 103.4667 inHg
Pitot (Pt) Airspeed Measure Range ¹	0.300 to 110.000 inHg
Airspeed Accuracy	0.01% or \pm 0.004 inHg , whichever is greater
Airspeed Rate ²	0 to 800 kt/min / 40.0 inHg/min
Altitude Resolution	0.1 kt / 0.01 mbar / 0.0001 inHg (Pt) / 0.01 mmHg
Airspeed Units ³	knots (Vc) / Qc (Differential) / inches mercury (inHg) millimeters of mercury (mmHg) / millibar (mBar) / PSID / PSIA Total Pressure (Pt) / inches water (inH ₂ 0) / kilometers (km) / MACH
Control Stability	0.001% FS (Absolute or Differential)
Display	10.4-inch LED backlit Touchscreen LCD
Touchscreen Display	Yes
Interfaces	RS-232 / USB (2) / Ethernet / IEEE-488 (optional)
EccADC Software	No
Operating Medium	Clean Dry Air
Altitude (Static) Port	37°AN6 (Front Panel)
Airspeed (Pitot) Port	37°AN4 (Front Panel)
Calibration Cycle	One (1) year
Power Requirements	90-264 VAC, 45 - 63 Hz, 1 PH
Dimension / Weight	19 x 10.5 x 20 in (19-inch rackmount) / 38 lbs (17.24 kg)

ADTS-1555 Air Data Test Set Calibrator Features

Front Panel

Rear Panel



- 1. 10.4" LED Touchcscreen LCD
- 2. Manual Vent switch
- 3. Power Switch
- 4. Airspeed Pitot (Pt) port
- 5. Altitude Static (Ps) port
- 6. USB ports (2)
- 7. RJ-45 Ethernet port
- 8. IEEE-488 port
- 9. RS-232 connector
- 10. Input Vacuum
- 11. Input Pressure
- 12. AC Power Input
- 13. Intake/Exhaust fans

Optional Support Equipment Unit

TestVonics Vacuum Pressure Unit (VPU) is available separately for the ADTS-1555. It is an 7-inch high (4U), rack-mounted pneumatic device that provides vacuum and pressure as external sources for use with Air Data Calibrators and Testers. The lightweight unit produces low noise and the dry diaphragm pump provides oil-free use with a 4,500 hour maintenance interval.



Vacuum Pressure Unit P/N: VPU-1000

1) Standard ranges listed. Ranges can be configured to comply with customer specific requirements. 2) The Altitude and Airspeed Slew Rates are load dependent. Slew rates and load test requirements may vary based on volume of the DUT and the performance of the pressure and vacuum source connected to the calibrator. 3) Standard units of measurement listed (at time of print). Additional units may be available upon user request. 5) The 115 VAC part numbers shown, 230VAC are available, use -230.



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