High Precision
RVSM Compliant

Rugged, compact durable design for
Flightline Applications

Calibrate, test and troubleshoot
Aircraft & Instruments

ADTS-3150 is common equipment that can be used for a variety of
Commercial Aircraft

TestVonics Part Numbers
ADTS-3150LR (Low Range)
ADTS-3150MR (Mid Range)

ADTS-3150 Flight Line Air Data Test Set

TestVonics ADTS-3150 Test Set is a portable, high precision, dual channel air data pressure management system. This tester is designed to calibrate, test and troubleshoot air data instrumentation and aircraft pitot-static systems. The test set has been designed with functional and reliability features highly suited to withstand the harsh environmental and demanding conditions of the flight line environment. The test set is designed for testing a wide range of commercial and military aircraft, both rotary and fixed wing. ADTS-3150 accuracy complies with RVSM testing standards.

Features

The ADTS-3150 features a brilliant 7.0-inch transflective, high-bright ruggedized widescreen LCD display. The display features an integrated resistive touchscreen and LED backlighting, which provide optimal visualization and increase viewing angle in direct sunlight. The backlit keypad is used to control the test set and can be operated using gloves or mittens. The ruggedized case features recessed hardware and wheels and a retractable handle for easy one person transport. The test set operates using a wide range of input power (90-260 VAC, 45-440 Hz power) making it ideally suited for the varying hangar, ramp and flight line power sources.

Simple and Intuitive Interface

The ADTS-3150 software features an intuitive graphical interface which has been designed to virtually eliminate the operator learning curve. Mode of operation can be cycled while testing and the display is uncluttered and easy to read.

Protection and Safety Features

The ADTS-3150 is designed with both hardware and software safety features designed for maximum protection when testing. The test set features input pressure regulation, over-range, over-limit and over-pressurization protection. Micro-porous filters and screening prevent debris from entering the system. The test set is equipped with pressure relief valves to protect the pneumatic system components and the unit under test (UUT) from damage. In the unlikely event that the test set loses power, the UUT is isolated and the UUT can be safely vented to ambient.

The software has a built-in Aircraft Select function which allows the operator to set the test set up for the UUT. Once set, the software automatically limits the ranges and rates for the specific aircraft under test. Test profiles can be created for routine testing which provide improved test consistency.
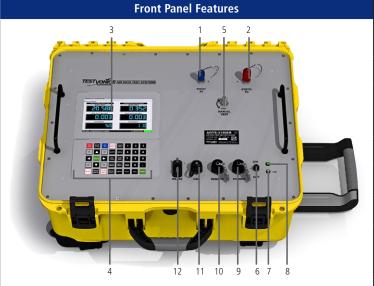
Remote Operation

The optional ADTS Remote Control Unit (RCU) features a full color touchscreen LED display and a color keypad. The remote features the same display interface used on the main unit and can perform all functions of the test set remotely. 25 and 50 ft remote interface cables are available.

Automated Calibration

Calibrations can be performed automatically through the use of TestVonics Air Data Calibrators. Corrections require no mechanical adjustments and the test set features a one (1) year cycle.

Specifications

Static (Ps) Altitude Control Range [1]	- 2,000 to 35,000 ft (LR - Low Range) - 2,000 to 65,000 ft (MR - Mid Range)
Altitude Accuracy	± 0.003 inHg or 0.01%, whichever is greater RVSM→
Altitude Rate [2]	0 to 6,000 ft/min
Altitude Rate Accuracy	± 10 ft/min or ± 1% of setting, whichever is greater
Altitude Units [3]	feet, meters, inHg, mmHg, mbar, hPa, PSIA
Pitot (Pt) Airspeed Control Range [1]	0 to 650 knots
Airspeed Accuracy	± 0.003 inHg or 0.01%, whichever is greater
Airspeed Rate [2]	0 to 400 kts/min
Airspeed Rate Accuracy	± 2% of setting
MACH	Range: 0.0 to 5.000 Resolution: 0.001 / Accuracy: 0.001 MACH
EPR	Resolution: 0.001 InHg
Altitude Resolution	0.1 kt / 0.01 mbar / 0.0001 inHg (Pt) / 0.01 mmHg
Airspeed Units [3]	IAS/CAS, kts, Mach, inHg, mmHg, mbar, EPR, hPa, PSIA, kph
Display	7.0-inch Widescreen LED backlit with Touchscreen
Interfaces	Remote, RS-232, USB *(optional)*
Altitude (Static) Port	37° flare AN-6 bulkhead or Self-Sealing Quick disconnect
Airspeed (Pitot) Port	37° flare AN-4 bulkhead or Self-Sealing Quick disconnect
Calibration Cycle	One (1) year
Power Requirements	90-260 VAC, 45 - 440 Hz, 1 PH
Dimension / Weight	22.8 x 18.3 x 11.7 in (579 x 465 x 297 mm) / 64 lbs

Front Panel Features

1. Airspeed Pitot (Pt) port
2. Altitude Static (Ps) port
3. 8.4" LED Touchscreen Display
4. LED Backlit Color Keypad
5. Manual Vent
6. Power Switch
7. Line Indicator
8. Power Indicator
9. AC Power Input
10. Remote Control Unit port
11. Service port
12. RS-232 Interface

ADTS Remote Control Unit *(optional)*

Molded rubber edges

3.5" color, sunlight readable Touchscreen display

Backlit Keypad 30-key backlit rubber keypad

Hand Strap

Case Features

Comfort molded 2-stage retractable handle

IP-67 Rated Waterproof

Rugged Latches

Comfort molded Handles

Polyurethane wheels

Test Set Accessories

Durable Storage Backpack

Remote Control Unit *(optional)*

Remote Control Cable Assembly *(optional)*

Power Cable Assembly

Static Hose Assembly

Pitot Hose Assembly

Recommended Support Equipment

Line Switching Unit (LSU) Series

Pitot Static Kits and Adaptors

1) Standard ranges listed. Ranges may be configured to comply with customer specific requirements - contact TestVonics for more information 2) The Altitude and Airspeed Slew Rates are load dependent. Slew rates and load test requirements may vary based on volume of the DUT. 3) Standard units of measurement listed (at time of print). Additional units may be available upon user request.