High Precision
RVSM Compliant

Rugged, compact durable design for
Flightline Applications

Calibrate, test and troubleshoot
Aircraft & Instruments

ADTS-2000 is common equipment that can be used for a variety of
Commercial Aircraft

TestVonics Part Number
ADTS-2000

ADTS-2000 Flight Line Air Data Test Set

TestVonics ADTS-2000 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. The ADTS-2000 accuracy complies with RVSM and was designed to replace the KTS-2000 Series test sets.

Features

The ADTS-2000 is based on the design of TestVonics ADTS-3300 Series Test Sets. The rugged, easy to use Remote Control Unit (RCU) features a full color touchscreen LED display and a color coded backlit keypad. The remote features an intuitive display format and allows single person operation from the ground or cockpit. A 50 foot remote cable is supplied standard. 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-2000 software features an intuitive graphical interface which has been designed to virtually eliminate the operator learning curve. Modes of operation can be cycled while testing and the display is full color and easy to read.

Protection and Safety Features

The ADTS-2000 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. The manual vent switch on the front panel can then be used to safely vent both the test set and the UUT 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 installed for routine testing which provide improved test consistency.

Easy Operation

The ADTS-2000 comes standard with a handheld remote control unit. The full color intuitive graphical user interface allows the operator to easily control and perform a variety of operations from Controlling the UUT to performing Leak Tests.

Automated Calibration

The ADTS-2000 can be calibrated automatically through software or using TestVonics ADC-2500 Series Calibrators. Corrections are done through software requires no mechanical adjustments. The transducers are able to hold their accuracy for a period of one year.
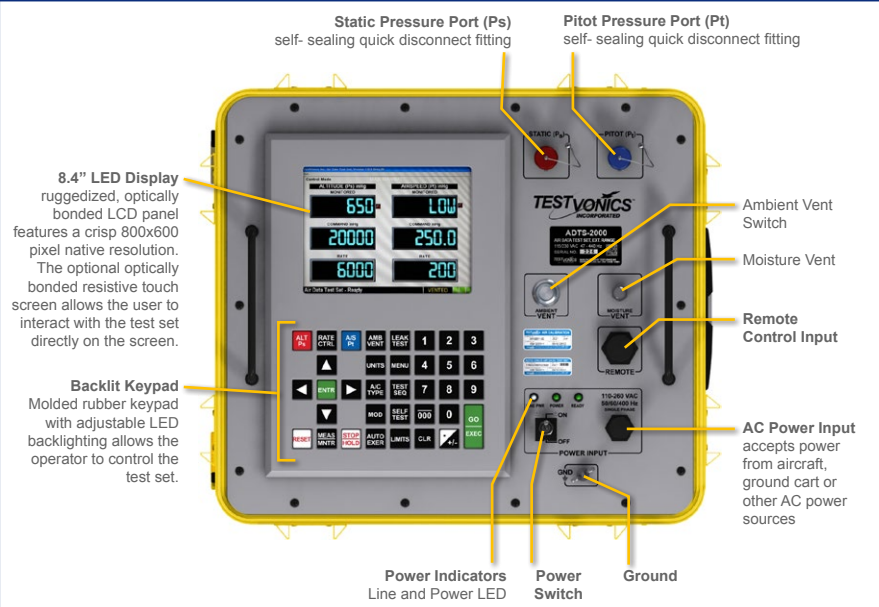
TestVonics™ ADTS-2000 Air Data Test Set

Altitude	Specifications
Altitude Ranges	-10,000 to 85,000 ft (Resolution: 1 foot)
Altitude Accuracy	±3 feet or ±0.035% from -2,000 to 50,000 feet: **RVSM→** ±7 feet at 30,000 feet ±27 feet at 60,000 feet (± 0.003 inHg or 0.01%, whichever is greater)
Altitude Slew Rate [1]	0 to 50,000 feet / min
Altitude Rate Accuracy	± 10 ft/min or ±1% of setting whichever is greater
Units	feet, meters, inHg, mmHg, mbar, hPa, PSIA,

Airspeed	Specifications
Airspeed Ranges	0 to 1,000 knots (Resolution: .1 knots)
Airspeed Accuracy	20 knots: ±2.0 knots 50 knots: ±0.8 knot 550 knots: ±0.05 knot 1000 knots: ±0.02 knot (± 0.003 inHg or 0.01%, whichever is greater)
Airspeed Slew Rate [1]	0 to 800 kts/min
Airspeed Rate Accuracy	± 2% of setting
MACH	Range: 0.0 to 5.0 / Resolution: 0.001 / Accuracy: better than 0.005
Units	kts, Mach, inHg, mmHg, mbar, EPR, hPa, PSIA, kph, inHg/Qc

Leading Particulars	Specifications
Weight	77-86 lbs (varies based on accessories)
Dimensions	19.47″ wide x 21.4″7 deep x 18.14 high″
Power	90-260 VAC, 45-440 Hz
Standard Interfaces	Remote, RS-232, USB, RJ-45

Standard Accessories	Optional Accessories (O)
15 ft Power Cable	Remote Control Unit (RCU)
20 ft Pitot Hose Assembly	50 ft Remote Control Unit Cable
20 ft Static Hose Assembly	(O) Extended Length Hose Assemblies
20 ft Ground Strap	(O) Extended Remote Cable Assemblies

ADTS-2000 Series Front Panel Features

Static Pressure Port (Ps)
self- sealing quick disconnect fitting

Pitot Pressure Port (Pt)
self- sealing quick disconnect fitting

8.4" LED Display
ruggedized, optically bonded LCD panel features a crisp 800x600 pixel native resolution. The optional optically bonded resistive touch screen allows the user to interact with the test set directly on the screen.

Backlit Keypad
Molded rubber keypad with adjustable LED backlighting allows the operator to control the test set.

Ambient Vent Switch

Moisture Vent

Remote Control Input

AC Power Input
accepts power from aircraft, ground cart or other AC power sources

Power Indicators
Line and Power LED

Power Switch

Ground

ADTS-2000 Air Data Test Set Maneuverability

Recessed Lift Handles

3-Stage Retractable Handle

ADTS-2000 Remote Unit

Molded rubber edges
provide additional shock absorption on the corners

3.5" Color Touchscreen
provides a 320 x 240 resolution, full color, sunlight readable and features a resistive touch screen

Housing
case is made of Xenoy, a durable, chemical resistant material, which is then coated for EMI emission

Status LED Indicators

Backlit Keypad
30-key molded backlit rubber keypad provides the user with all of the front panel buttons

Hand Strap
the rear panel features a heavy duty hand strap

Remote Port
provides power and data connection to RCU -remote also features a USB 2.0 connection and sealed compact flash slot

[2] Lower rates may apply when operating with larger volumes. Some specifications can be tailored to meet certain customer specific requirements, contact TestVonics for more information.

TestVonics™ ADTS-2000 Air Data Test Set

Specifications

Static (Ps) Altitude Control Range [1]	- 10,000 to 85,000 ft (Resolution: 1 ft)
Altitude Accuracy	± 0.003 inHg or 0.01%, whichever is greater **RVSM**➔ ±3 feet or ±0.035% from -2,000 to 50,000 feet: ±7 feet at 30,000 feet ±27 feet at 60,000 feet
Altitude Rate [2]	0 to 50,000 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 1,000 knots (Resolution: 0.1 knot)
Airspeed Accuracy	± 0.003 inHg or 0.01%, whichever is greater 20 knots: ±2.0 knots 50 knots: ±0.8 knot 550 knots: ±0.05 knot 1000 knots: ±0.02 knot
Airspeed Rate [2]	0 to 800 kts/min
Airspeed Rate Accuracy	± 2% of setting
MACH	Range: 0.0 to 5.0 / Resolution: 0.001 / Accuracy: better than 0.005
Airspeed Units [3]	IAS/CAS, kts, Mach, inHg, mmHg, mbar, EPR, hPa, PSIA, kph
Display	8.4-inch LED backlit Touchscreen LCD
Interfaces	External (Remote, optional USB) / Internal (RS-232, USB)
Altitude (Static) Port	Self-Sealing Quick disconnect or 37°Flare AN6
Airspeed (Pitot) Port	Self-Sealing Quick disconnect or 37° Flare AN4
Calibration Cycle	One (1) year
Power Requirements	90-260 VAC, 45 - 440 Hz, 1 PH
Dimension / Weight	19.47 x 21.47 x 18.14 in (LxWxH) / 82 lbs or less

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. Grounding port
6. Power Switch
7. Line Indicator
8. Power Indicator
9. AC Power Input
10. Remote Control port
11. Manual Vent
12. Moisture Vent

Case Features & Maneuverability

Rubber Bumpers

Replaceable ruggedized wheel assemblies

Louvered Air Intakes with EMI Shielded Filters

Recessed MOPP IV complaint grasp handles

Telescoping 3-stage field replaceable handle

Remote Control Unit

Molded rubber edges

3.5" color, sunlight readable Touchscreen display

Backlit Keypad 30-key backlit rubber keypad

Hand Strap

Optional Support Equipment

Pitot Static Kits and Adaptors

Line Switching Unit

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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.