

TestVonics™ Flightline Series Air Data Test Sets

# **ADTS-2000 Air Data Test Set**

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) ±3 feet or ±0.035% from -2,000 to 50,000 feet: Altitude Accuracy $\pm 7$ feet at 30,000 feet $\pm 27$ feet at 60,000 feet ( $\pm$ 0.003 inHg or 0.01%, whichever is greater) Altitude Slew Rate 1 0 to 50.000 feet / min $\pm$ 10 ft/min or $\pm$ 1% of setting whichever is greater Altitude Rate Accuracy feet, meters, inHq, mmHq, mbar, hPa, PSIA, Units

#### Airspeed **Specifications** Airspeed Ranges 0 to 1.000 knots (Resolution: .1 knots) 20 knots: ±2.0 knots 50 knots: ±0.8 knot Airspeed Accuracy 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

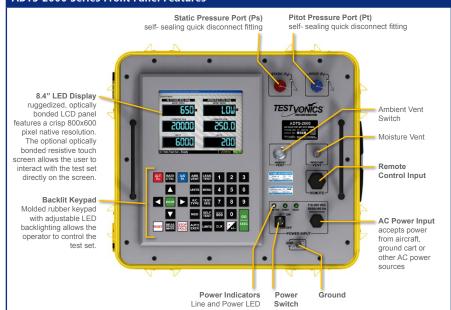
#### **Leading Particulars Specifications**

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

#### Standard Accessories **Optional Accessories (O)**

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

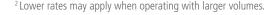
## ADTS-2000 Series Front Panel Features





#### ADTS-2000 Remote Unit





Some specifications can be tailored to meet certain customer specific requirements, contact TestVonics for more information.

Hand Strap

hand strap

the rear panel

features a heavy duty





provides power and data connection

to RCU -remote also features a USB

2.0 connection and sealed compact

## TestVonics<sup>™</sup> ADTS-2000 Air Data Test Set

### **Specifications** Static (Ps) Altitude - 10,000 to 85,000 ft (Resolution: 1 ft) Control Range 1 ± 0.003 inHg or 0.01%, whichever is greater RVSM> **Altitude Accuracy** $\pm 3$ feet or $\pm 0.035\%$ from -2,000 to 50,000 feet: $\pm 7$ feet at 30,000 feet $\pm 27$ feet at 60,000 feet Altitude Rate 2 0 to 50.000 ft/min **Altitude Rate Accuracy** $\pm$ 10 ft/min or $\pm$ 1% of setting, whichever is greater Altitude Units <sup>3</sup> feet, meters, inHg, mmHg, mbar, hPa, PSIA Pitot (Pt) Airspeed 0 to 1,000 knots (Resolution: 0.1 knot) Control Range 1 $\pm$ 0.003 inHg or 0.01%, whichever is greater Airspeed Accuracy 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 <sup>3</sup> 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

## Case Features & Maneuverability Rubber Bumpers Replaceable ruggedized wheel assemblies Louvered Air Recessed MOPP IV Intakes with EMI complaint grasp Shielded Filters Telescoping 3-stage field replaceable handle



**Front Panel Features** 

- 1. Airspeed Pitot (Pt) port
- Altitude Static (Ps) port
- 8.4" LED Touchscreen Display 3.
- LED Backlit Color Keypad
- Grounding port
- Power Switch

- Line Indicator
- 8. Power Indicator
- 9. AC Power Input
- 10. Remote Control port
- 11. Manual Vent
- 12. Moisture Vent

### **Remote Control Unit**



## **Optional Support Equipment**



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.



