

# Flightline Air Data Test Equipment

ADTS-2000 Digital Air Data Test Set

KTS-2000 REPLACEMENT\*

High Precision RVSM Accuracy

Rugged and durable designed Flightline Tester

Calibrate, test and troubleshoot **Aircraft & Instruments** 

TestVonics Part Number ADTS-2000

\*Designed to replace the Kollman KTS-2000 P/N: 18910920000 / 18910920001 / 18910920002



# **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 Kollsman KTS-2000 Series.

#### **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**

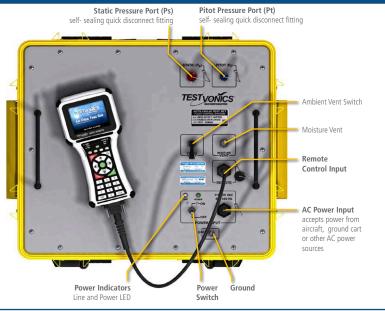
The ADTS-2000 can be calibrated automatically through software or using TestVonics ADC-2500 Series Calibrators. Corrections are done through software requires no mechanical adjustments. The transducers are able to hold their accuracy for a period of one year.

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

### Altitude Rate Accuracy Units  ### 10 ft/min or ±1% of setting whichever is greater  ### feet, meters, inHg, mmHg, mbar, hPa, PSIA,  ### Specifications  Airspeed Ranges  ### O to 1,000 knots  ### 2.0 knots: ±2.0 knots  ### 20 knots: ±2.0 knots  ### 20 knots: ±0.05 knot  ### 1000 knots: ±0.02 knot  ### 20 knots: ±0.05 knot  ### 1000 knots: ±0.02 knot  ### 1000 knots: ±0.00 knot  ### 1000 k	Altitude	Specifications
Altitude Accuracy ±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  feet, meters, inHg, mmHg, mbar, hPa, PSIA,  Airspeed Specifications  Airspeed Ranges 0 to 1,000 knots (Resolution: .1 knots)  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 Rate¹ 0 to 800 kts/min  Airspeed Rate Accuracy ± 2% of setting  Mach Range 0.0 to 5.0 Mach (0.001 Mach Resolution)  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	Altitude Ranges	-10,000 to 80,000 ft (Resolution: 1 foot)
### Altitude Rate Accuracy  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting whichever is greater  ### 10 ft/min or ±1% of setting    ### 10 ft/min or ±0.8 knot  ### 10 ft	Altitude Accuracy	$\pm 7$ feet at 30,000 feet $\pm 27$ feet at 60,000 feet
Units  feet, meters, inHg, mmHg, mbar, hPa, PSIA,  Airspeed  Airspeed Ranges  O to 1,000 knots  20 knots: ±2.0 knots 50 knots: ±0.8 knot 550 knots: ±0.05 knot (± 0.003 inHg or 0.01%, whichever is greater)  Airspeed Slew Rate  O to 800 kts/min  Airspeed Rate Accuracy  Mach Range  O.0 to 5.0 Mach (0.001 Mach Resolution)  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	Altitude Slew Rate 1	0 to 50,000 feet / min
Airspeed Ranges  O to 1,000 knots (Resolution: .1 knots)  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 Mach (0.001 Mach Resolution)  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	Altitude Rate Accuracy	$\pm$ 10 ft/min or $\pm$ 1% of setting whichever is greater
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	Dimensions	19.47" wide x 21.4"7 deep x 18.14 high"
Standard Interfaces Remote, RS-232, USB, RJ-45	Power	90-260 VAC, 45-440 Hz
	Standard Interfaces	Remote, RS-232, USB, RJ-45

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





#### **ADTS-2000 Remote Unit**



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

<sup>&</sup>lt;sup>2</sup> Lower rates may apply when operating with larger volumes.