

# ADTS-3100 Air Data Test Set

High Precision  
**RVSM Compliant**

Portable and Lightweight design for  
**Flightline Applications**

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

TestVonics Part Number  
**ADTS-3100**



*Suitcase Design*



*Retractable Handle and Wheel Assembly option*



## ADTS-3100 Flight Line Air Data Test Set

TestVonics ADTS-3100 Test Set is a portable, lightweight, high precision, dual channel air data pressure management system. The test set is designed to test, verify and troubleshoot air data instrumentation and aircraft Pitot-Static systems. The test set is designed primarily for hanger, ramp or flight line environment. The ADTS-3100 can be set up for a wide range commercial and military aircraft. Base line configurations provide for low, mid and high operation. Operational limits for altitude, airspeed and rates can be implemented at no additional charge to the customer.

### Features

The ADTS-3100 features a brilliant 8.4-inch transfective, high-bright ruggedized LCD display. The display features an optically bonded resistive touchscreen and adjustable LED backlighting, which provide optimal visualization and increase viewing angle in direct sunlight. The test set can be operated using the integrated touchscreen. Inputs can be made using a finger, gloved hand or with the tethered stylus. The system is enclosed in a ruggedized crushproof, container. It features easy open latches, automatic pressure equalization valve, and a comfortable rubber over-molded handle. Additionally, test sets can be provided with a retractable handle and wheel assembly. Either configuration allows for easy one person transport. The test set operates off of universal AC power over a wide range of input (90-260VAC, 45-440 Hz power).

### Simple and Intuitive Interface

The ADTS-3100 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 uncluttered and easy to read.

## Protection and Safety Features

The ADTS-3100 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 created for routine testing which provide improved test consistency.

## Optional Remote Control Unit (RCU)

The ADTS-3100 can be operated with the optional RCU from the aircraft cockpit. The RCU is a time saver and makes testing air data instruments an easy through one person operation. The RCU uses controls similar to the main unit and features a full color LED touchscreen display and backlit keypad. The RCU allows operators to perform all necessary operations including airspeed, altitude rates and leak test. The RCU includes a 25ft or optional 50ft cable.

## Automated Calibration

The system can be calibrated automatically through software. Corrections require no mechanical adjustments and the system can hold its accuracy for a period of one (1) year year.

# ADTS-3100 Air Data Test Set

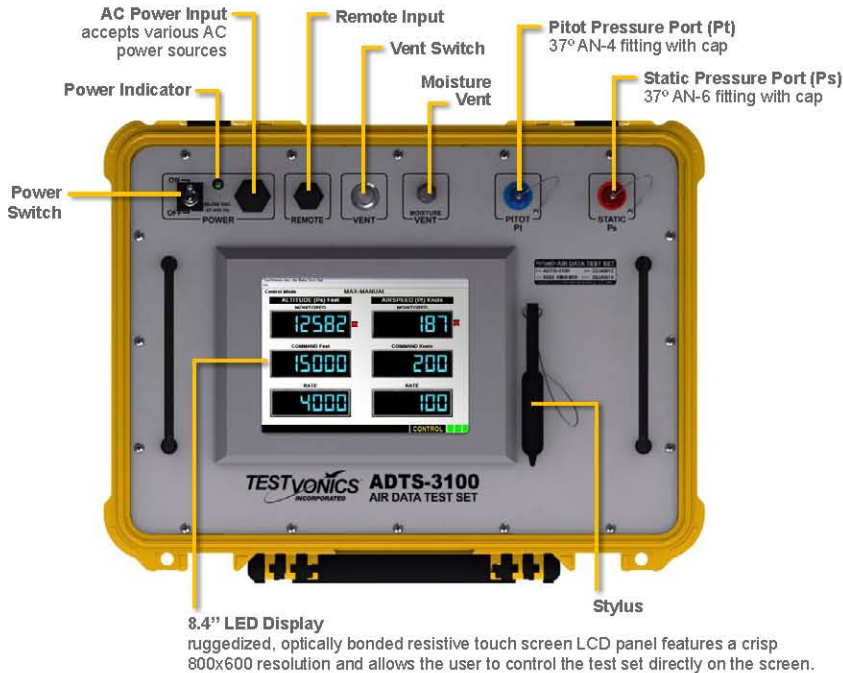
Altitude	Specifications
Altitude Ranges	- 2,000 to 35,000 ft ( <i>low range</i> ) - 2,000 to 50,000 ft ( <i>mid range</i> ) - 2,000 to 65,000 ft ( <i>high range</i> )
Altitude Accuracy	± 0.003 inHg or 0.01%, <i>whichever is greater</i>
Altitude Slew Rate <sup>1</sup>	0 to 6,000 ft/min* ( <i>ascent or descent</i> )
Altitude Rate Accuracy	± 10 ft/min or ± 1% of setting, <i>whichever is greater</i>
Units <sup>2</sup>	feet (ft), meters (m), Ps (inHg), millibar (mBar) *For aircraft safety, test set controls in aeronautical units only (ft & kts)



Airspeed	Specifications
Airspeed Range	0 to 250 kts ( <i>low range</i> ) 0 to 400 kts ( <i>mid range</i> ) 0 to 600 kts ( <i>high range</i> )
Airspeed Accuracy	± 0.003 inHg or 0.01%, <i>whichever is greater</i>
Airspeed Slew Rate <sup>1</sup>	0 to 400 kts/min
Airspeed Rate Accuracy	± 2% of setting
Mach Range	0.0 to 2.0 Mach ( <i>0.001 Mach Resolution</i> )
Units <sup>2</sup>	IAS/CAS, Knots (kts), Mach, Pt (inHg), Qc, mbar,

Leading Particulars	Specifications
Weight	35 - 52 lbs (varies based on accessories)
Dimensions	19.78 x 15.56 x 7.41 in (LxWxH)
Power	90-260 VAC, 45-440 Hz
Standard Interfaces	Remote, RS-232, USB, RJ-45 Ethernet

## ADTS-3100 Series Front Panel Features



## ADTS-3100 Air Data Test Set Accessories

Carrying Case	3 colors available Optional retractable handle/wheel assy
Pitot and Static Hose	Hose Length: 20ft ( <i>standard</i> ) Custom configuration & lengths are available - Ps connection 37° AN-6 flared (Red) - Pt connection 37° AN-4 flared (Blue)
Power Cable	Cable Length: 15ft ( <i>standard</i> ) Power cords be specially tailored to comply with electrical plugs and sockets used by country within the voltage and current rating of the system. The shape, size and type of electrical connector can be provided per customer request.
Grounding Strap	Cable Length: 15ft ( <i>standard</i> ) This strap grounds the tester to earth ground.
Remote Control Unit	Remote Control ( <i>optional</i> ) Allows operator to control ADTS remotely from cockpit or flight deck. The RCU is provided with a standard 25ft or optional 50ft remote control cable.



## ADTS-3100 Part Number Matrix

Part No. ADTS-3100-**Power**-**Range**-**Color**-**Option**

-AC	AC Power	-GR	Green case
-DC	DC Power	-GY	Gray case
-ER	Extender Range	-YL	Yellow case
-MR	Mid Range	-AE	Altimeter Encoder
-LR	Low Range	-RM	Remote Control Unit

## ADTS-3100 Remote Control Unit (RCU)



<sup>1</sup>Lower ranges apply when operating with larger volumes or loads. <sup>2</sup>Other units available upon request at no additional charge. Specifications may be tailored to meet certain customers specifications or requirements. Contact TestVronics directly for additional information and for pricing with options.

