

ADTS Series

Ranges

Static (Ps) 32.148 to 0.815 inHg
-3,000 to 80,000 ft

Pitot (Pt) 0.250 to 112.000 inHg
0 to 1,000 Kts

Units of Measurement

feet, meters, km, mbar, knots, inHg, inH₂O, mmHg, mbar, Qc, PSID, PSIA, Total Pressure (Pt), MACH

Expansive 10.4-inch touchscreen display

Intuitive Graphical User Interface

RS-232, IEEE-488.2 (optional), USB



ADTS-1575 Air Data Calibrator

The ADTS-test set is an RVSM compliant Air Data Test Set. The ADTS can be used to test instrumentation as a bench top unit or remotely with Automated Test Equipment (ATE). As a controller, the ADTS requires external pressure and vacuum sources (available separately). The operational ranges can support testing of both commercial and military air data instrumentation, pressure transducers and pressure test gauges. Common instrumentation includes Altimeters, Airspeed indicators, Air Data computers, ROC indicators, Cabin Pressure instrumentation, Mach meters, pressure transducers, absolute and digital pressure gauges, air data monitors and much more.

The ADTS uses an intuitive graphical user interface and can be operated manually using the front panel touchscreen or included keyboard and mouse. A wide range of calibrations and simulations can be performed that monitor and control Ps, Pt, Qc, Mach, Rate of Climb and more. The instrument can be controlled and measured in a range of units including feet, knots, inHg, mbar, psi, inH₂O. Each channel can

be controlled individually or together, Mach or Airspeed can be held constant while altitude is controlled.

The ADTS can also be operated manually through local controls, automatically through RS-232 or IEEE-488 (optional) or using the semi-automated test program function. Test Program reduces touch labor by running pre-programmed routines with defined set points, eliminating manual set point entry. This allows improved test consistency for regular test routines or procedures.

The ADTS is designed with both hardware and software safety features designed for maximum protection when testing. In the event that the test set loses power, the front panel manual vent can be used to safely vent both the test set and the UUT to ambient.

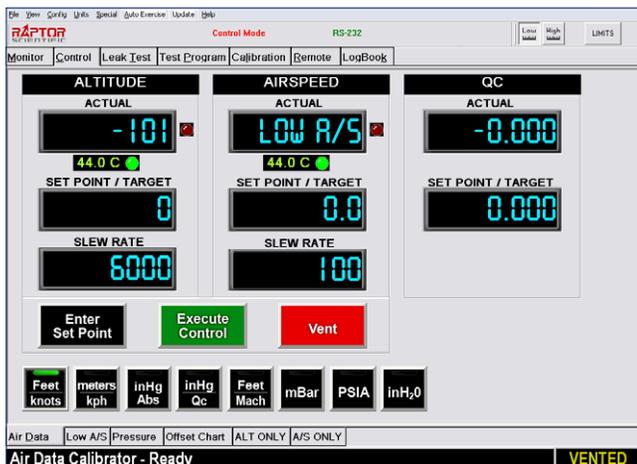
The ADTS-1575 can be calibrated using many approved secondary standards, Corrections to the test set are done through software requiring no mechanical adjustments.



Specifications	
Altitude (Ps) Range	-3,000 to 80,000 ft (32.148 to 0.815 inHg)
Static (Ps) Sensor	0.250 to 38.000 inHg
Static (Ps) Accuracy	±3 ft at -3,000 ft ±7 ft at 30,000 ft ±36 ft at 65,000 ft ±75 ft at 80,000 ft or ±0.003 inHg, whichever is greater RVSM →
Altitude Rate	0 to 50,000 ft/min (40.0 inHg/min)
Altitude Units	feet, meters, inHg, inH ₂ O, mmHg, mbar, hPa, PSIA
Airspeed (Pt) Range	0.00 to 1,000 knots (0.6449 to 103.4667 inHg)
Pitot (Pt) Sensor	0.250 to 112.000 inHg
Pitot (Pt) Accuracy	±0.003 inHg from 0.250 to 46.000 inHg ±0.005 inHg from 50.000 to 60.000 inHg ±0.007 inHg from 70.000 to 80.000 inHg ±0.012 inHg from 90.000 to 110.000 inHg
Airspeed Rate	0 to 800 kts/min (40.0 inHg/min)
Airspeed Units	kts, Qc, inHg, inH ₂ O, mmHg, mbar, hPa, PSIA, kph, Mach
Control Stability	0.001% FS (Absolute or Differential)
Operating Medium	Clean Dry Air or Nitrogen (<i>non-density sensitive</i>)
Display	10.4-inch with touchscreen display
Interfaces	RS-232, USB (x3), LAN, VGA
Altitude (Static) Port	Standard: Male JIC 37° -6 AN Stainless Steel bulkhead
Airspeed (Pitot) Port	Standard: Male JIC 37° -4 AN Stainless Steel bulkhead
Calibration Cycle	One (1) year
Power	90-265 VAC, 45 - 440 Hz, 1 Phase
Dimensions	19.0 x 10.5 x 20.0 in (19-inch rackmount)
Weight	39 lbs (17.24 kg)

Intuitive Graphical User Interface

The ADC Series software and additional apps feature an intuitive user interface which is easy to use and has a low learning curve. Operators select modes of operation from tabs and sub-tabs selectable using the touchscreen or mouse and keyboard.



Front Panel Features



Front Panel



Rear Panel

- 10.4-inch touch display
- Manual Vent valve
- Power switch
- Airspeed Pitot (Pt) input
- Altitude Static (Ps) input
- USB ports (3)
- Ethernet (LAN) port
- RS-232 interface
- VGA (HD15) port
- IEEE-488.2 (optional)
- Input Vacuum
- Input Pressure input
- AC Power Input
- Fans

Vacuum and Pressure Sources

Pressure and Vacuum sources are required when using the ADTS Series as a controller. Our line of oil-free pressure and vacuum sources provide clean, dry air to the calibrator. Standalone, benchtop and rackmount options are available.

Pressure Source
P/N: ADC-2500-PRES-115
NSN: 6830-01-653-2523
P/N: ADC-2500-PRES-230

Vacuum Source
P/N: ADC-2500-VAC-115
NSN: 4310-01-653-2521
P/N: ADC-2500-VAC-230
NSN: 4310-01-670-3652



Compact, high performance oil-free vacuum source features a hermetic design providing a robust pumping speed of 60 Lpm and a low base pressure. 115 and 230 models available.

19-inch rackmount PRU Series provides Pressure only or the VPU Series provides both Vacuum and Pressure - single or dual output options available.

