

## Ranges

**Static (Ps)** 42.4375 to 0.2046 inHg

**Pitot (Pt)** 0.300 to 112.3230 inHg

Qualified plug and play replacement for Honeywell ADT-222B Air Data Test Sets

## Units of Measurement

feet, meters, km, mbar, knots, inHg, inH<sub>2</sub>O, mmHg, mbar, Qc, PSID, PSIA, Total Pressure (Pt), MACH

# ADC Series

Expansive 10.4-inch  
touchscreen display

Intuitive Graphical  
User Interface

RS-232, IEEE-488.2, USB,  
ADT-222B emulation



replaces ADT-222B Models

P/N: **4047505-422 / 421**

NSN: **4920-01-105-0016**

## ADC-2522C Air Data Calibrator

The ADC is a high accuracy air data management system capable of controlling and measuring Altitude and Airspeed pressures to the highest degree of accuracy. The control and measurement range of the test system meets or exceeds most requirements for commercial and military test applications.

The ADC utilizes two digi-quartz absolute pressure transducers which provide unmatched accuracy and long term stability. An expansive 10.4-inch LED touchscreen display and an intuitive graphical user interface provide ease of use. A Sperry/Honeywell IEEE-488-1978 compatible emulator can provide a plug and play solution for the legacy ADT-222B SCPI command and circular interface. The ADC-2522 model was fully tested and qualified by United States Air Force as a direct replacement for the ADT-222B under the same NSN. The ADC-2522C model add interfaces like VGA, RS232, USB and RJ-45.

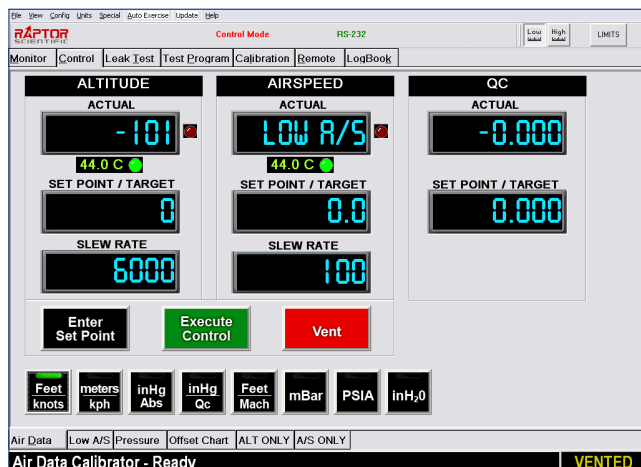
The ADC is designed with hardware and software features for maximum protection to the operator and unit under test (UUT). The calibrator features input pressure regulation, over-range, over-limit and over-pressurization protection. Micro-porous filters and screening prevent debris from contaminating the system. The calibrator is equipped with pressure relief valves to protect the pneumatic system components and the UUT from damage. In the event that the calibrator loses power, internal vent valves and a front panel manual vent can be used to safely vent to ambient. Test Program mode allows the operator to create a virtually unlimited number of test routines for semi-automated testing and report generation, saving time and providing improved test consistency.

The ADC can be calibrated using a Primary Pressure Standard that will cover the full range (ADCS601, Dead Weight, Schwien).

	Specifications
Altitude (Ps) Range	-10,000 to 109,985 ft
Static (Ps) Sensor	42.4375 to 0.2046 inHg
Static (Ps) Accuracy	±0.003 inHg or 0.008% FS, whichever is greater
Altitude Rate	0 to 50,000 ft/min (40.0 inHg/min)
Altitude Resolution	1 ft, 0.01 mbar, 0.0001 inHg (Ps), 0.01 mmHg
Altitude Units	feet, meters, inHg, inH <sub>2</sub> O, mmHg, mbar, hPa, PSIA
Airspeed (Pt) Range	0 to 1,050 knots
Pitot (Pt) Sensor	0.300 to 112.3230 inHg
Pitot (Pt) Accuracy	±0.004 inHg or 0.008% FS, whichever is greater
Airspeed Rate	0 to 800 kts/min (40.0 inHg/min)
Airspeed Resolution	0.1 kt, 0.01 mbar, 0.0001 inHg (Pt), 0.01 mmHg
Airspeed Units	kts, Qc, inHg, inH <sub>2</sub> 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 Projected Capacitive (PCAP) touchscreen
Interfaces	RS-232, IEEE-488.2, ADT-222 (IEEE-488.1978 SCPI), 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	38 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 interface
- ADT-222B interface
- Input Vacuum
- Input Pressure input
- AC Power Input
- Fans

### Vacuum and Pressure Sources

Pressure and Vacuum sources are required when using the ADC 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.

