

Ranges

Static (Ps) 42.4375 to 0.2046 inHg

Pitot (Pt) 0.300 to 112.3230 inHg

Units of Measurement

feet, meters, km, mbar, knots, inHg, inH₂O, 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,



ADC-2550C Air Data Calibrator

NSN: **4920-01-670-6976**

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 allow the operator control the calibrator directly from the front panel. The intuitive graphical user interface features easily accessible modes of operation, including: Measure, Control, Leak Test, Test Program (capable of programming test sequences), Remote and Calibration. The ADC features several interfaces, including RS-232, IEEE-488.2 (for remote operation), VGA, USB2.0 (3x) and RJ-45.

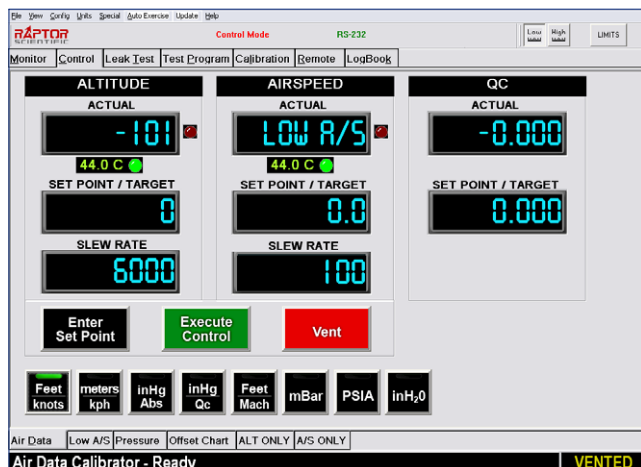
The ADC is designed with hardware and software features for maximum protection to the operator and unit under test (UUT). The calibrator features input pressure regulation, over-range, over-limit and over-pressurization protection. Micro-porous filters and screening prevent debris from contaminating 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 ₂ O, mmHg, mbar, hPa, PSIA
Airspeed (Pt) Range	0 to 1,050 knots
Pitot (Pt) Sensor	0.6449 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 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 Projected Capacitive (PCAP) touchscreen
Interfaces	RS-232, IEEE-488.2, 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



Rear Panel



- 10.4" touch display
- Manual Vent switch
- Power switch
- Airspeed Pitot (Pt) port
- Altitude Static (Ps) port
- USB ports (x2)
- RJ-45 Ethernet port
- IEEE-488 port
- RS-232 port
- VGA port
- Input Vacuum port
- Input Pressure port
- AC Power Input
- Intake/Exhaust 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.

