

# TestVonics<sup>™</sup> Precision Air Data Calibrators ADC-2550 Air Data Calibrator

## Perform enhanced Calibrations on a Variety of Equipment

Brilliant, High Resolution LED Backlit 10.4" LCD Touchscreen

Easy to use, intuitive and upgradable Graphical User Interface

TestVonics Part Number NSN: 6695-01-590-1161 P/N: ADC-2550



## ADC-2550 Air Data Calibrator

TestVonics ADC-2550 Air Data Calibrator is a high accuracy air data management system. The calibrator is 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. In addition, accuracy of ADC-2550 complies with requirements for RVSM.

#### **Features**

The ADC-2550 features a brilliant 10.4-inch LED backlit LCD display. A 5-wire resistive touchscreen allows the calibrator to be controlled directly from the front panel. An on-screen keyboard appears automatically when operator input is needed. Additionally a USB keyboard and mouse is included with the calibrator for redundant data input if desired. The calibrator uses 2 digiquartz transducers which provide unmatched performance. Corrections are done through software requiring no mechanical adjustments and are capable of holding accuracy for a period of one (1) year.

### Simple and Intuitive Interface

The ADC-2550 software provides a familiar and intuitive graphical user interface. Modes of Operation are easily selected through tabs located along the top of the screen. The operator can easily switch between modes while testing without affecting operation. The calibrator measures and records readings, while displaying data as a table or graphically. All information is stored directly on the calibrator and reports can be printed. The ADC-2550 can be operated remotely using the RS-232 (serial) port on the rear panel. The operating platform allows the system to be upgraded for future test applications through software upgrades, standalone installer packages or customized software applications.

### **Protection and Safety Features**

The ADC-2550 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, the manual vent can be used to safely vent both the test set and the UUT to ambient. The Test Program function allows the operator to create virtually unlimited test number of test routines for automated testing. These test routines save time and provide improved test consistency.

	12 22	He hav carle unti Autobarte me			10.0	
Restriction (inc. scilla Data Childrens, 2005)350 Minuter Mode ritor [Control   Leak Test [Yot. Characterization   Test Brogram   Calibration		Test/Initia Line Line Data Calibratio, 20085 Monitor Control Leak Test Vol. Charac		tion Remote LogBook	11	
Ps (inHg)	Pt (inHg)	Ps (inHg)	Pt (InHg)	Che fit many traylower I	abc	1
		28.9478	28.9469	CLR	auc	Nex
28.3485	68.3485	44.0 C C	44.0 C			
remperature 44.0 C Temperature	44.0 C	SET POINT / TARGET	SET POINT / TARGET	1	2	3
Diff. Pressure (Pt - Ps)		28.9766	28.9766		_	
		8000		4	5	6
				_		
	Measure Vent	Enter Exect Set Point Contr	stop / Vent	7	8	9
inHg mmHg inH <sub>2</sub> 0 PSI	Ps Pt Dual	Feet meters inHg in	nHg Feet		0	ENT
sta Gage			QS MIRN		U	ENI
		Air Data Gage			-	
ir Data Calibrator - Ready	Leak Test Mode	Ar Data Calibrator - Ready	Test Pro	ogram (Cor	ntrol	
	Leak Test Mode			ogram (Cor	ntrol)	
z DATA CHIIStator - Radv 1990 - Long V. J. J. Land J.	Leak Test Mode	Air Data Calibrator - Ready	tent Program Meter Internation Test Program Calibra	Eon Bemote LogBook		
r Date Calibrator - Radov ne cere on Antonia na Televinana - el braccimente del cuel fontale	Leak Test Mode	Air Data Calibrator - Ready	at Test Program Mode cterization Test Program Calibra CONTE			
r Data Cellitation - Ready Tomorous de la communicación de la communicación Antonescente de las desarrous tori (mais per communicación (mais communicación (mais communicación)) pe communicación (mais communicación) (mais communicación) pe communicación (mais communicación) (mais communicación)	Leak Test Mode	Air Data Calibrator - Ready	40 Test Program Mater cterization (Test Program Calibra CONTE France Program Calibra France Program Calibra	Kon (Semate LogBoos) ROL TEST PROGRA KOL TEST PROGRA KOLA PT Test Ps at 30.0 or Ps Pf Psado Psa Psado		Mo
Control of	Leak Test Mode	Air Data Gallibrator - Ready	terization Test Program Mater Centration Test Program Calibra CONTS France Product Program 1 200,0000 KA	Eon Samote LogBook ROL TEST PROGRA HORA PT Test Ps at 30.8 IF 12.9 # 12.00 14 - 2000 14 - 2000	A NA PIDE NA PI NA PI	Mo
	Leak Test Mode	Air Data Calibrator - Ready	terization Test Program Mater Centration Test Program Calibra CONTS France Product Program 1 200,0000 KA	Eon Samote LogBook ROL TEST PROGRA HORA PT Test Ps at 30.8 IF 12.9 # 12.00 14 - 2000 14 - 2000	A NA PIDE NA PI NA PI	Mo
Child Children Construction     1	Leak Test Mode	All Data Calibrator - Ready To the only on Allowing the Tenness on allow forward allow Particle (press the file) (no Data State Pressure (Pre- State Pressure (Pre- State Pressure (Pre- State Pressure (Pre- State Press (Pre- State Press (Pre- State Press (Pre- State Pre- State Press (Pre- State Pre- State Pre- Stat	Test Program Mader       ctarization     Test Program     Calbra       CONTF     CONTF       1     20.000     NA       2     20.000     NA       3     20.000     NA	Eon Birmote LogBook ROLTEST PROCRAM ROLTEST PRACORA INF FARE TRADE TO 1 2000 1 20	NA PIOP	Mo
Detri effilistione Resov Informatione Resov Resource Resource Re	Leak Test Mode	Air Data Calibrator - Ready Set on an announce of the Set of the Set of the Set of the Set of the Set of the Set of the Set of the Set of the Se	Interformers Maket       Carterialism     Test (program)     Carterialism       Carterialism     Test (program)     Carterialism       Control     Carterialism     Carterialism       Test Able     Test (program)     Carterialism       Test (program)	Ean Serrote LogBook COL TEST PROCINAL NOR TEST PROCINAL NOR PT Test Pa at 30.8 1 0000 1 00000 1 00000 1 00000 1 00000 1 0000	NT PIDI NA PI NA PI NA PI	Mo
Child Children Construction     1	Leak Test Mode	All Data Calibrator - Ready To the only on Allowing the Tenness on allow forward allow Particle (press the file) (no Data State Pressure (Pre- State Pressure (Pre- State Pressure (Pre- State Pressure (Pre- State Press (Pre- State Press (Pre- State Press (Pre- State Pre- State Press (Pre- State Pre- State Pre- Stat	Id     Trei/Program locat       Latration     Test/program     Calibre       Latration     Sociologic     Sociologic       Latration     Sociologic     Sociologic     Sociologic	Ean Serrote LogBook COL TEST PROCINAL NOR TEST PROCINAL NOR PT Test Pa at 30.8 1 0000 1 00000 1 00000 1 00000 1 00000 1 0000	NA PIOP	Mo
Tother Service and Service Ser	Leak Test Mode	Air Dain Cilliontor - Rendy Total di un datassi ile Totalesce di un constante del Rendr Losseni José Tot (loc della State Pressure (Ph-P) Est Poler i Tablett Diff Pressure (Ph-P) Italaumi (Ph-P) Italaum	Mail     Test Program     Califier       CONT     Califier     Califier       1     20000     Califier       1     20000     Califier       2     20000     Califier       3	Kon Smoth Logiton X ROL TEST PROGRAM MILE TEST PROGRAM MILE TO THE TO THE TO THE	A NGT PIGH NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI	
Control Childratory Ready C	Leak Test Mode	Air Dain Cilliontor - Rendy Total di un datassi ile Totalesce di un constante del Rendr Losseni José Tot (loc della State Pressure (Ph-P) Est Poler i Tablett Diff Pressure (Ph-P) Italaumi (Ph-P) Italaum	Mathematical Strength Strengt Strength Strength Strength Strength Strength Stre	Kon Smoth Logiton X ROL TEST PROGRAM MILE TEST PROGRAM MILE TO THE TO THE TO THE	A NGT PIGH NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI NGA DI	Mo

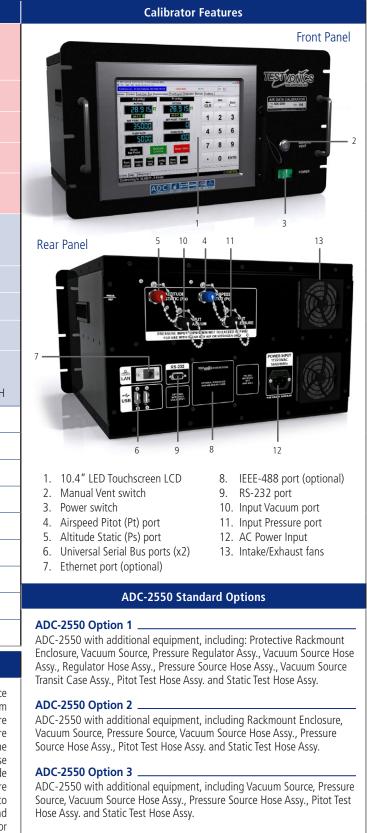
## **TestVonics**<sup>®</sup> ADC-2550 Air Data Calibrator

	Specifications		
Static (Ps) Altitude Control Range <sup>1</sup>	-10,000 to 109,985 ft 42.4375 to 0.2046 inHg		
Altitude Accuracy	$\pm$ 0.003 inHg or 0.008% FS		
Altitude Rate <sup>2</sup>	0 to 50,000 ft/min		
Altitude Resolution	1 ft / 0.01 mbar / 0.0001 inHg (Ps) / 0.01 mmHg		
Altitude Units <sup>3</sup>	feet (ft) / meters (m) / millibar (mBar) / inches mercury (inHg) millimeters mercury (mmHg) / inches water (inH20) / PSIA		
Pitot (Pt) Airspeed Control Range <sup>1</sup>	0.00 to 950.0 kts 0.6449 to 95.0810 inHg		
Airspeed Accuracy	$\pm$ 0.004 inHg or 0.008% FS		
Airspeed Rate <sup>2</sup>	0 to 800 kt/min		
Altitude Resolution	0.1 kt / 0.01 mbar / 0.0001 inHg (Pt) / 0.01 mmHg		
Airspeed Units <sup>3</sup>	knots (Vc) / Qc (Differential) / inches mercury (inHg) millimeters of mercury (mmHg) / millibar (mBar) / PSID / PSIA Total Pressure (Pt) / inches water (inH20) / kilometers (km) / MACH		
Control Stability	0.001% FS (Absolute or Differential)		
Operating Medium	Clean Dry Air or Nitrogen		
Display	10.4-inch LED backlit Touchscreen LCD		
Interfaces	RS-232 / USB (x2) / RJ-45 Ethernet / IEEE-488 (optional)		
Altitude (Static) Port	37° Flare AN6 bulkhead (rear panel)		
Airspeed (Pitot) Port	37° Flare AN4 bulkhead (rear panel)		
Calibration Cycle	One (1) year		
Power Requirements	90-260 VAC, 45 - 440 Hz, 1 PH		
Dimension / Weight	19 x 10.5 x 20 in (19-inch rackmount) / 38 lbs (17.24 kg)		

#### **Optional Pressure & Vacuum Sources**



High performance oil-free vacuum and pressure sources are available for the ADC-2550. These sources provide ample pressure and vacuum to the calibrator and are suitable for use with a wide variety of other equipment.



#### ADC-2550 Option 4 .

ADC-2550 with additional equipment, including Vacuum Source, Vacuum Source Hose Assy., Pitot Test Hose Assy. and Static Test Hose Assy.

1) Standard ranges listed. Ranges can be configured to comply with customer specific requirements. 2) The Altitude and Airspeed Slew Rates are load dependent. Slew rates and load test requirements may vary based on volume of the DUT and the performance of the pressure and vacuum source connected to the calibrator. 3) Standard units of measurement listed at time of print, additional units may be available. 5) The 115 VAC part numbers shown, 230VAC are available 6) ADC-2500-VAC-230 NSN: 4310-01-670-3652.



TestVonics Incorporated 375 Jaffrey Road Peterborough, NH 03458 CAGE: 1A9E1 Phone: (603) 924-5922 Web: www.testvonics.com