

Model 8375 AccuBALANCE[®] Modular Air Balancing Tool



The TSI Model 8375 ACCUBALANCE Modular Air Balancing Tool is ideal for HVAC testing and balancing and also for industrial hygiene applications. The heart of the Model 8375 is a revolutionary micromanometer that easily detaches from the base for use with a wide variety of probes to measure diffuser flow rate, point velocity, average velocity, pressure differential, temperature and humidity. Simplify your business with this economical and comprehensive measurement solution.

Applications

- HVAC system testing, adjusting and balancing
- Building and system commissioning
- Energy efficiency studies
- Filter face velocity testing
- Clean room testing
- Industrial hygiene studies
- Regulatory compliance checks
- Fume hood and biological safety cabinet flow measurements with optional BSC accessory

Features

- Time-saving features for more readings per day
- Auto-zero technology eliminates manual zero calibrations between readings
- Built-in sensors for barometric pressure and air temperature to ensure accuracy and eliminate the need for manual entry
- Back-pressure compensation
- Accurate, even in low range conditions
- Fast response for logged readings in 2 to 8 seconds
- Measures both supply and exhaust flows; displays flow direction
- New 16-point velocity matrix for fume hood face velocity, filter face velocity, and irregular area velocity averages
- Optional BSC accessory allows direct flow measurements of biological safety cabinets and fume hoods
- Large, easy-to-read, backlit display
- Powered by 4-AA NiMH batteries (supplied) or alkaline batteries; 12-hour typical battery life; internal battery charger
- Logs up to 1,000 time/date stamped readings
- TSI's LogDat[™] downloading software included
- Wheeled luggage-style carrying case for easy transport

Specifications

Model 8375 ACCUBALANCE Modular Air Balancing Tool

Air Velocity*	
Range	25 to 8,000 ft/min (0.13 to 41 m/s) Pitot Probe 25 to 5,000 ft/min (0.13 to 25 m/s) Air Flow Probe 25 to 2,500 ft/min (0.13 to 13 m/s) Velocity Matrix
Accuracy	3% of reading; ± 7 ft/min (0.04 m/s)** All Probes
Volume	
Range	25 to 2,500 ft ³ /min CFM (42 to 4,250 m ³ /h) Capture Hood
Accuracy	$\pm 3\%$ of reading; ± 7 ft ³ /min at >50 ft/min (± 11.9 m ³ /h at >0.25 m/s)
Resolution	1 ft ³ /min (1 m ³ /h)
Differential Pressure	
Range	± 15 in. wc (3735 Pa); 150 in. wc maximum safe operating pressure
Accuracy	2% of reading; ± 0.001 in. wc (0.025 mm wc) from 0.050 to 15 in. wc
Resolution	0.00001 in. wc (0.00025 mm wc)
Absolute Pressure	
Range	15 to 40 in. Hg (356 to 1016 mm Hg)
Accuracy	2% of reading
Resolution	0.01 in. Hg (1 mm Hg)
Temperature Probe*	
Range	-40 to 250 °F (-40 to 121 °C) probe dependent
Accuracy	0.5 °F (0.3 °C) from 32 to 160 °F (0 to 71 °C); typically 2.0 °F (1.2 °C) from -40 to 32 °F (-40 to 0 °C) and from 160 to 250 °F (71 to 121 °C)
Resolution	0.1 °F (0.1 °C)
Relative Humidity Probe*	
Range	0 to 95% RH
Accuracy	3% RH
Resolution	0.1% RH
Statistics	min, max, average up to 1,000 readings for each measured parameter
Averaging Capability	Up to 1,000 values each of measured parameter
Sampling Interval	Continuous or user selectable (10 to 600 s)
Response Time	2 to 8 s
Size	
External Dimensions	7.4 in. \times 4.5 in. \times 2.3 in. (18.8 cm \times 11.4 cm \times 5.8 cm)
Weight with Batteries	7.4 lbs (3.4 kg) with 2 \times 2 ft hood (610 mm \times 610 mm)
Instrument Operating	
Range	40 to 140 °F (4.4 to 60 °C)
Meter Display	6 digit LCD, 0.75 in. character height, multi-line sectored high contrast backlit
Power	4 AA-size batteries rechargeable NiMH (included) or alkaline, AC adaptor
Battery Life	12 hr typical
Battery Recharge Time	Typical 5 hr (internal charger)
Warranty	2-yr factory warranty

* These specifications apply only when the applicable accessory probes are used with the Model 8375 ACCUBALANCE Modular Air Balancing Tool.

**At >50 ft/min

Specifications are subject to change without notice.

Model Selection Chart

Model	Manometer	2 \times 2 ft hood	Velocity Matrix	Temp Probe	Air Flow Probe	RH & Temp
8375-AN1	•	•				
8375-XX1	•	•	•	•	•	•

All models include: Model 8375 ACCUBALANCE Modular Air Balancing Tool, 2 ft \times 2 ft (610 mm \times 610 mm) capture hood, carrying case, 18-in. (45.7 cm) pitot probe, two static pressure probes, 16-ft (5 m) Neoprene tubing, battery charger (internal & external), 4-AA rechargeable NiMH batteries, AC adaptor, LogDat downloading software, NIST traceable calibration certificate and manual.



Additional accessories included with Model 8375-XX1.

Accessories Available

A variety of optional probes are available. Consult TSI or your local distributor for a full listing of available accessories and probes.



Optional Biological Safety Cabinet Hood Kits available in two sizes.

8-in. Kit PN 801491
10-in. Kit PN 801492



TSI Incorporated

United States: Tel: 651 490 2811 Toll Free: 1 800 874 2811 Fax: 651 490 3824 E-mail: answers@tsi.com
Germany: Tel: +49-241 523030 Fax: +49-241 523 0349 E-mail: tsigmbh@tsi.com
Sweden: Tel: +46-8-595-132 30 Fax: +46-8-595-132 39 E-mail: tsiab@tsi.com
United Kingdom: Tel: +44-1275-847837 Fax: +44-1275-842437 E-mail: tsiuk@tsi.com

or visit www.tsi.com to find your closest TSI Representative or distributor.