

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 3% of reading; ± 7 ft/min (0.04 m/s)** All Probes
Accuracy	
Volume	
Range	25 to 2,500 CFM (42 to 4,250 m ³ /h) Capture Hood
Accuracy	$\pm 3\%$ of reading; ± 7 CFM at >50 ft/min (± 11.9 m ³ /h at >0.25 m/s)
Resolution	1 CFM (1 m ³ /h)
Differential Pressure	
Range	± 15 in. wc (3735 Pa); 150 in. wc (45.8 kPa) maximum safe operating pressure
Accuracy	2% of reading; ± 0.001 in. wc (0.25 Pa) from 0.050 to 15 in. wc (0.015 to 4.58 kPa)
Resolution	0.00001 in. wc (0.0025 Pa)
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 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)
Accuracy	
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 (610 mm \times 610 mm) hood
Instrument Operating	
Range	40 to 140 °F (4.4 to 60 °C)
Meter Display	6 digit LCD, 0.75 in. (229 mm) 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 (>0.25 m/s)

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
8375M	•	•	opt.	opt.	opt.	opt.

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), 4-AA rechargeable NiMH batteries, universal AC adaptor, LogDat downloading software, NIST traceable calibration certificate and manual.



Optional accessories available with Model 8375M.

Accessories Available

A variety of optional probes are available. Consult TSI or your local distributor for a full listing of available accessories, hoods and probes. Additional hood sizes: 1 \times 4 ft (305 \times 1,220 mm), 1 \times 5 ft (305 \times 1,525 mm), 2 \times 4 ft (610 \times 1,220 mm), 3 \times 3 ft (915 \times 915 mm)



Optional Biological Safety Cabinet Hood Kits available in two sizes. 8-in. (203 mm) Kit PN 801491 10-in. Kit (254 mm) PN 801492



TSI GmbH—Tel: +49-241 523030 Fax: +49-241 523 0349 E-mail: tsigmbh@tsi.com
TSI AB—Tel: +46-8-595-132 30 Fax: +46-8-595-132 39 E-mail: tsiab@tsi.com
TSI Instruments Ltd.—Tel: +44-1275-847837 Fax: +44-1275-842437 E-mail: tsiuk@tsi.com
TSI France—Tel: +33 (0)4 91 95 21 90 Fax: +33 (0)4 91 06 53 91 E-mail: tsiFrance@tsi.com

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