

Air Volume Instruments



Model EBT731 *(Accessories shown on following page)*

EBT Balometer® Capture Hood

Model EBT731

The EBT731 Balometer® Capture Hood is a multipurpose electronic air balancing instrument primarily used for efficiently taking direct air volume readings at diffusers and grilles. It features a detachable micromanometer which can be used with optional probes for increased flexibility in multiple measurement applications.

Offering durable, trouble-free operation, this lightweight, ergonomically designed capture hood kit saves time and money by combining multiple measurement tools into one package. The EBT731 Balometer® Capture Hood helps you create healthy and energy efficient environments while meeting local codes, guidelines and regulations for ventilation systems.

Features and Benefits

- Ergonomic design and ultra light weight for easy, one-person operation
- Automatically senses and displays supply or return flows, saving time on the job
- Back pressure compensation ensures accurate readings
- Multiple hood sizes available for easy, cost effective use across multiple jobs
- Detachable digital micromanometer offers flexibility to use in multiple applications

Applications

- Test and balance contractors
- Commissioning agents
- Facilities managers
- Health and safety specialists
- Ventilation system installers

Rugged. Reliable. Professional.

TSI | ALNOR®



Model EBT730 *(Micromanometer shown with standard and optional accessories)*

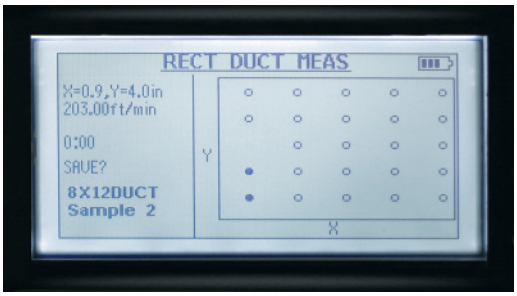
Detachable Micromanometer

Model EBT730

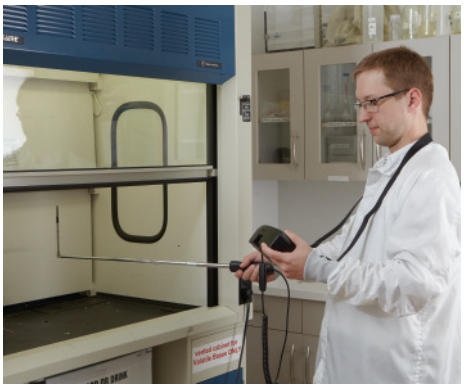
The EBT731 Balometer® Capture Hood includes a detachable EBT730 micromanometer—one of the most advanced, versatile, and easy to use micromanometers on the market today. The EBT730 features an auto-zeroing pressure sensor that increases measurement resolution and accuracy along with an intuitive menu structure for ease of operation.

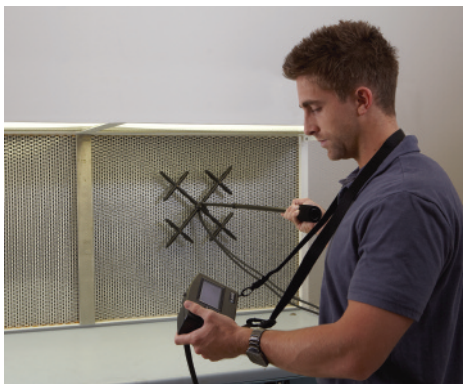
Features and Benefits

- Accurately measures pressure, velocity and flow to help you meet industry standards
- Auto-zeroing pressure sensor reduces user-steps and saves time
- Automatic density correction increases reading accuracy
- Intuitive menu structure allows for ease of use and setup
- Large graphic display with backlight offers easy-to-use interface
  - Displays up to five measurements simultaneously
  - On-screen messages and instructions
  - Programmed for multiple languages
- Integrated Log-Tchebycheff duct traverse application simplifies calculations
- Bluetooth communications for transferring data or remote polling
  - Compatible with AiRNAB™ digital documentation system
- Includes downloading software with USB cable
- Accommodates optional pitot, air flow (straight pitot), temperature/relative humidity, velocity matrix, or thermoanemometer probes for use in multiple applications









Specifications

Models EBT730 and EBT731

Velocity Range

Pitot probes	25 to 15,500 ft/min (0.125 to 78 m/s)
Air flow probe	25 to 5,000 ft/min (0.125 to 25 m/s)
Velocity matrix	25 to 2,500 ft/min (0.125 to 12.5 m/s)
Accuracy	±3% of reading ±7 ft/min (±0.04 m/s) at velocities >50 ft/min (>0.25 m/s)
Units	ft/min, m/s
Resolution	1 ft/min (0.01 m/s)

Pressure

Differential pressure	
	±15 in. H_2O (±3735 Pa); 150 in. H_2O (37.5 kPa), maximum safe operating pressure
Absolute pressure	15 to 40 in. Hg (356 to 1016 mm Hg)
Accuracy	±2% of reading ±0.0001 in. H_2O (±0.025 Pa) static and differential; ±2% of reading absolute
Units	in. H_2O, in. Hg, Pa, hPa, kPa, mm Hg, cm Hg, mm H_2O, cm H_2O,
Resolution	0.00001 in. H_2O (0.001 Pa) static and differential; 0.01 in. Hg (1 mm Hg) absolute

Volume

Range	25 to 2,500 ft^3/min (42 to 4250 m^3/h) capture hood
Accuracy	±3% of reading ±7 ft^3/min (±12 m^3/h) at flows >50 ft^3/min (>85 m^3/h)
Units	ft^3/min, m^3/h, m^3/min, l/s
Resolution	1 ft^3/min (1 m^3/h)

RH

Range	5 to 95% RH temperature/RH probe
Accuracy	±3% RH
Resolution	0.1% RH

Temperature

Sensor in base	40 to 140°F (4.4 to 60°C)
Temperature/RH probe	14 to 140°F (-10 to 60°C)
Accuracy	±0.5°F (±0.3°C)
Units	°F, °C
Resolution	0.1°F (0.1°C)

Instrument Temperature Range

Operating	40 to 140°F (4.4 to 60°C)
Storage	-4 to 160°F (-20 to 71°C)

Statistics

min, max, average

Data Storage

26,500 samples, time and date stamped

Logging Interval

User selectable

Response Time

2 to 8 seconds, differential pressure sensor

Dimensions (manometer only)

7.4 in. x 4.5 in. x 2.3 in. (18.8 cm x 11.4 cm x 5.8 cm)

Pressure Connection

¼ in. (6.35 mm) OD straight ports with barbed ends for use with 3/16 in. (4.76 mm) ID flexible tubing

Weight with Batteries

EBT730	17 oz (0.5 kg)
EBT731	7.4 lb (3.4 kg)

Power Requirements

Four AA-size cells or AC adapter

Ordering Information

EBT730	Manometer with carrying case, 4 AA size rechargeable NiMH batteries, multi-country AC adapter, 18 in. (46 cm) Pitot probe, 2 Static Pressure probes, 16 ft (4.8 m) Neoprene tubing, downloading software, USB interface cable, NIST-traceable calibration certificate, and manual.
EBT731	2 ft x 2 ft (610 mm x 610 mm) air capture hood/frame/base, manometer with carrying case, 4 AA size rechargeable NiMH batteries, multi-country AC adapter, 18 in. (46 cm) Pitot probe, 2 Static Pressure probes, 16 ft (4.8 m) Neoprene tubing, wheeled luggage-style carrying case, NIST-traceable calibration certification, downloading software, USB interface cable, and manual.

Air Volume Instruments

Models EBT730 and EBT731

Hood Sizes Available (EBT731)

Standard Hood Kits

801097	2 ft x 2 ft (610 mm x 610 mm)

Optional Hood Kits

801201	2 ft x 4 ft (610 mm x 1220 mm)
801200	1 ft x 4 ft (305 mm x 1220 mm)
801202	1 ft x 5 ft (305 mm x 1525 mm)
801203	3 ft x 3 ft (915 mm x 915 mm)
801209	16 in. x 16 in. (406 mm x 406 mm)
801210	5.25 in. x 4 ft (133 mm x 1220 mm)
801211	28 in. x 28 in. (710 mm x 710 mm)
801212	28 in. x 50 in. (710 mm x 1270 mm)

BSC Hood Kit

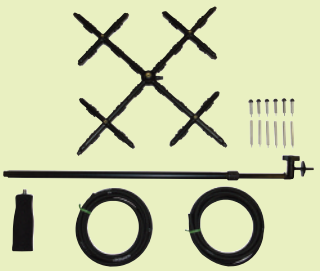
801204	8 in. x 22 in. (205 mm x 560 mm)
801205	10 in. x 22 in. (255 mm x 560 mm)

The BSC hood kits are used to certify Class II bio-safety cabinets by taking direct in-flow measurements for NSF compliance.

Recommended Accessories

800187	Air flow probe, 18 in. (46 cm)
800218	Temperature probe
800219	Humidity and temperature probe
801090	Velocity matrix, telescopic handle, (2) 8 ft. (2.4 m) neoprene tubing sections
960	Air Velocity and Temperature, Straight Probe
962	Air Velocity and Temperature, Articulating Probe
964	Air Velocity and Temperature and Humidity, Straight Probe
966	Air Velocity and Temperature and Humidity, Articulating Probe
634634000	Pitot probe 5/16 in. (8 mm) diameter - 12 in. (30 cm)
634634001	Pitot probe 5/16 in. (8 mm) diameter - 18 in. (46 cm)
634634002	Pitot probe 5/16 in. (8 mm) diameter - 24 in. (61 cm)
634634003	Pitot probe 5/16 in. (8 mm) diameter - 36 in. (91 cm)
634634005	Pitot probe 5/16 in. (8 mm) diameter - 60 in. (152 cm)
634650002	Duct plug, 3/8 in. (9.5 mm) diameter - 1000 pieces
634650003	Duct plug, 3/8 in. (9.5 mm) diameter - 5000 pieces
8934	Wireless Bluetooth Printer

Specifications subject to change without notice.
TSI, the TSI logo, Alnor, and Balometer are trademarks of TSI Incorporated.
AIRNAB is a trademark of AIRNAB LLC.

Optional Accessories	Description / Part Number
	**Airflow Probe 800187** 18 in. (46 cm) straight probe that can be used to perform a duct traverse and to measure face velocity measurements in applications such as chemical fume hoods, HEPA filters, or other laminar flow devices. Ideal for small diameter ductwork.
	**Velocity Matrix 801090** Used to measure face velocities of HEPA filters, chemical fume hoods, laminar flow benches, filter banks, kitchen exhausts, and other applications where a large surface area needs to be measured. The 16 point grid covers one square foot area and averages the air velocity while minimizing the affects of turbulence to produce a stable reading.
	**Thermoanemometer Air Velocity Probe Models 960 962, 964, 966** Available in straight or articulating construction, and with without a relative humidity sensor. Models with a relative humidity sensor can also calculate wet bulb and dewpoint temperature.
	**Temperature and Humidity Probe 800220** Telescopic probe extends from 9 to 39 in. (230 to 990 mm) and is ideal for measuring inside of duct work before and after a coil. Probe can be inserted into a standard 5/16 in. (8 mm) diameter hole typically used for pitot traverses and can be used to calculate wet bulb and dewpoint temperatures.

Alnor Products, TSI Incorporated - 500 Cardigan Road Shoreview, MN 55126-3996 USA
USA **Tel:** +1 800 424 7427 **E-mail:** customerservice@alnor.com

Contact your local Alnor Distributor or visit our website **www.alnor.com** for more detailed specifications.

P/N 5001434 Rev A Copyright © 2012 by TSI Incorporated Printed in U.S.A.