

# EBT BALOMETER<sup>®</sup> CAPTURE HOOD MODEL EBT731

AIR VOLUME INSTRUMENTS

The EBT731 Balometer™ Capture Hood is a multipurpose electronic air balancing instrument used for taking accurate, direct air volume measurements at diffusers and grilles. The corresponding detachable micromanometer can be used with an array of optional probes to enable various measurement applications. Compatible with LogDat™ Mobile Remote Reader Software and capture hood stand, the EBT731 maximizes worker productivity and efficiency—saving you valuable time on the jobsite for ultimate profitability.



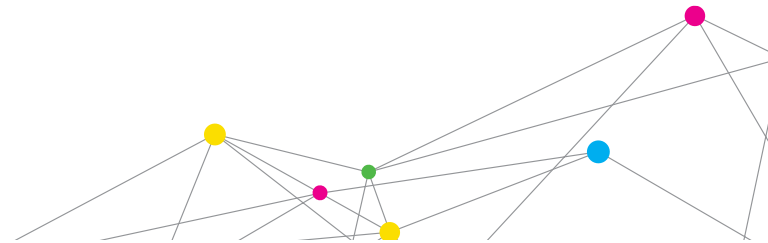
Model EBT731-STA Bundle shown.

## Applications:

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

## Features and Benefits

- + Ergonomic, lightweight design enables easy one-person operation
- + Automatic sensing and display of supply or return flows saves time on the job
- + Back pressure compensation ensures accurate readings at high flow rates
- + Detachable digital micromanometer provides additional measurement capability
- + Multiple hood size options enable measurement of different outlet dimensions
- + Compatible LogDat Mobile Remote Reader and Data Logger Software option simplifies documenting of results and emailing of reports
- + Capture hood stand eliminates the need for ladders (reaching diffusers up to 15 ft. (4.5 m))



# DETACHABLE MICROMANOMETER MODEL EBT730

AIR VOLUME INSTRUMENTS

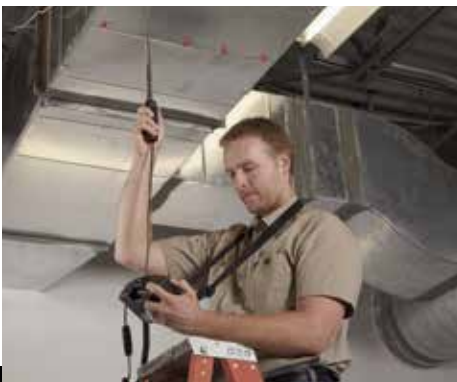
As standard, the EBT731 Balometer Capture Hood includes a detachable EBT730 micromanometer – one of the most advanced, versatile, and easy to use micromanometers on the market today. The EBT730 features an auto-zeroing pressure sensor that increases measurement resolution and accuracy as well as integrates an intuitive menu structure to facilitate simple operation.



Model EBT730 (Micromanometer shown with standard and optional accessories)

## Features and Benefits

- + Accurate measurement of pressure, velocity and flow complies with industry standards
- + Auto-zeroing pressure sensor reduces user-steps and saves time
- + Automatic density correction increases reading accuracy
- + Large, backlit graphic display offers easy-to-use interface
  - Up to five simultaneous measurements
  - On-screen messages and instructions
  - Multi-language capability
- + Intuitive menu structure for easy operation
- + Integrated Log-Tchebycheff duct traverse mapping application simplifies calculations
- + Bluetooth bi-directional communication eases data transfer and permits use of LogDat Mobile Remote Reader and Data Logger Software for Android devices
- + Optional pitot, air flow (straight pitot), temperature/relative humidity, velocity matrix, or plug and play thermoanemometer probes enables use in multiple applications



Plug and play thermoanemometer probes enables use in multiple applications.

## Specifications

### Micromanometer Model EBT730 and Capture Hood Model 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 <sub>2</sub> O (±3735 Pa); 150 in. H <sub>2</sub> O (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 <sub>2</sub> O (±0.025 Pa) static and differential; ±2% of reading absolute
Units	in. H <sub>2</sub> O, in. Hg, Pa, hPa, kPa, mm Hg, cm Hg, mm H <sub>2</sub> O, cm H <sub>2</sub> O
Resolution	0.00001 in. H <sub>2</sub> O (0.001 Pa) static and differential; 0.01 in. Hg (1 mm Hg) absolute
Volume	
Range	25 to 2,500 ft. <sup>3</sup> /min (42 to 4250 m <sup>3</sup> /h) capture hood, supply and return
Accuracy	±3% of reading ±7 ft. <sup>3</sup> /min (±12 m <sup>3</sup> /h) at flows >50 ft. <sup>3</sup> /min (>85 m <sup>3</sup> /h)
Units	ft. <sup>3</sup> /min, m <sup>3</sup> /h, m <sup>3</sup> /min, l/s
Resolution	1 ft. <sup>3</sup> /min (1 m <sup>3</sup> /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 and sum	
Data Storage	
25,500 samples, time and date stamped	
Logging Interval	
User selectable	
Response Time	
2 to 8 seconds, differential pressure sensor	
Power Requirements	
Four AA-size cells or AC adapter	
Physical Characteristics	
Dimensions (micromanometer only)	7.4 in. x 4.5 in. x 2.3 in. (18.8 cm x 11.4 cm x 5.8 cm)
Weight with Batteries	EBT730 17 oz. (0.5 kg) EBT731 7.4 lb. (3.4 kg)
Pressure Connection	1/4 in. (6.35 mm) OD straight ports with barbed ends for use with 3/16 in. (4.76 mm) ID flexible tubing

Standard Accessories	
Capture Hood Model EBT731	Micromanometer Model EBT730
+ Wheeled luggage-style carrying case	+ Micromanometer carry case
+ 2 ft. x 2 ft. (610 mm x 610 mm) air capture hood/frame/base	+ AA rechargeable NiMH batteries (qty = 4)
+ Detachable micromanometer	+ Multi-country AC adapter
+ AA rechargeable NiMH batteries (qty = 4)	+ 18 in. (46 cm) pitot probe
+ Multi-country AC adapter	+ Static pressure probes (qty = 2)
+ 18 in. (46 cm) pitot probe	+ 16 ft. (4.8 m) neoprene tubing
+ Static pressure probes (qty = 2)	+ Down-loading software
+ 16 ft. (4.8 m) neoprene tubing	+ USB interface cable
+ Down-loading software	+ NIST-traceable calibration certificate
+ USB interface cable	+ Product manual
+ NIST-traceable calibration certificate	
+ Product manual	

## SPECIFICATIONS

### EBT BALOMETER® MODEL EBT731 DETACHABLE MICROMANOMETER MODEL EBT730


#### Recommended Optional Accessories


Hood Kits	
801097 (standard)	2 ft. x 2 ft. (610 mm x 610 mm)
801200	1 ft. x 4 ft. (305 mm x 1220 mm)
801201	2 ft. x 4 ft. (610 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)
801206	1 ft. x 4 ft. (305 mm x 1,220 mm) and 2 ft. x 4 ft. (610 mm x 1,220 mm)
801207	1 ft. x 5 ft. (305 mm x 1,525 mm) and 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)
80215	1 ft. x 3 ft. (305 mm x 915 mm)
801204 (BSC*)	8 in. x 22 in. (205 mm x 560 mm)
801205 (BSC*)	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.

Duct Plugs	
634650002	3/8 in. (9.5 mm) diameter - 1000 pieces
634650003	3/8 in. (9.5 mm) diameter - 5000 pieces





Printer	
8934	Wireless Bluetooth printer

LogDat™ Mobile Software	
LogDat Mobile Remote reader and data logger Android™ Software App available via Google Play™	

Capture Hood Stand	
CH-Stand Extends up to 15 ft. (4.5 m with EBT731 attached) to take readings from ceiling diffuser without the use of a ladder. Capture hood is secured onto quad bracket and two extension pole sections can be raised to desired height and locked in place. Hood stand uses wheels for ease of movement and portability.	

EBT731 Bundle	
<b>EBT731-STA Bundle</b> Includes: EBT 731 Capture Hood, Capture Hood Stand, Smart Tablet* loaded with LogDat™ Mobile App and instruction videos. *TSI has the discretion to change the brand and model of tablet at any time.	

#### Probes

<b>Airflow Probe 800187</b> Straight air flow probe, 18 in. (46 cm). Used to perform a duct traverse and to measure face velocity measurements. Ideal for small diameter ductwork.	
<b>Temperature and Humidity Probe 800220</b> Telescopic temperature and humidity probe, extends 9-39 in. (230-990 mm). Used for measuring inside of duct work. Can be inserted into a standard 5/16 in. (8 mm) diameter hole typically use for pitot traverses with the ability to calculate wet bulb and dewpoint temperatures.	
<b>Thermoanemometer Air Velocity Probes</b>	
<b>Model 960</b> Straight air velocity and temperature probe	
<b>Model 962</b> Articulating air velocity and temperature probe	
<b>Model 964</b> Straight air velocity, temperature and humidity probe with ability to calculate wet bulb and dewpoint temperature	
<b>Model 966</b> Articulating air velocity, temperature and humidity probe with ability to calculate wet bulb and dewpoint temperature	
<b>Velocity Matrix 801090</b> 16 point Telescopic Velocity Matrix. Used for measuring face velocities of HEPA filters, chemical fume hood, laminar flow benches, filter banks, kitchen exhausts and other applications where a large surface area needs to be measured. Grid covers 1 ft. <sup>2</sup> (0.09 m <sup>2</sup> ) and averages the air velocity while minimizing the effects of turbulence to produce a stale reading.	
<b>Pitot Probes</b>	
634634000	5/16-12 in. (8 mm - 30 cm) diameter
634634001	5/16-18 in. (8 mm - 46 cm) diameter
634634002	5/16-24 in. (8 mm - 61 cm) diameter
634634003	5/16-36 in. (8 mm - 91 cm) diameter
634634005	5/16-60 in. (8 mm - 152 cm) diameter

Specifications subject to change without notice.  
TSI, the TSI logo, Alnor, LogDat and Balometer are trademarks of TSI Incorporated.  
Android and Google Play are trademarks of Google Inc.