



# EBT Balometer® Capture Hood

Model EBT731



Model EBT731 -STA Bundle shown

**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.

## 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

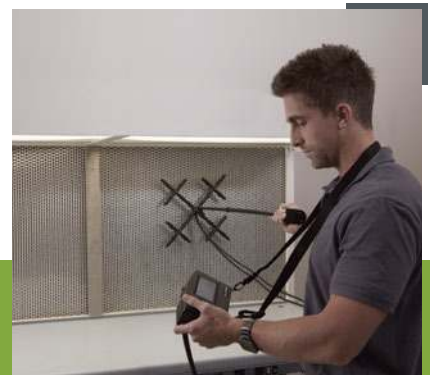


Model EBT730 (Micromanometer shown with standard and optional accessories)

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.

## 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

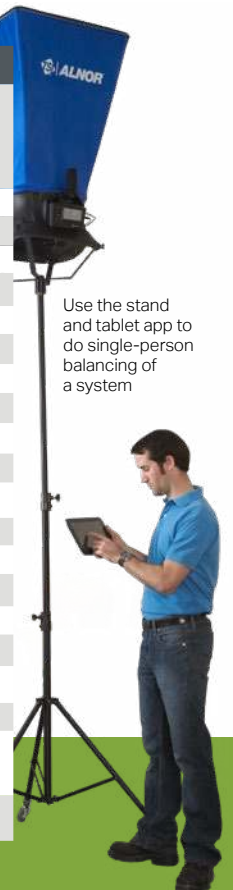
# Micromanometer Model EBT730 and Capture Hood Model EBT731

| Velocity Range        |  |
|-----------------------|--|
| Pitot probes          | 0.125 to 78 m/s (25 to 15,500 ft/min)  |
| Air flow probe        | 0.125 to 12.5 m/s (25 to 2,500 ft/min)   |
| Velocity matrix       | 0.125 to 12.5 m/s (25 to 2,500 ft/min)   |
| Accuracy              | ±3% of reading ±0.04 m/s (±7 ft/min) at velocities >0.25 m/s (50 ft/min)   |
| Units                 | m/s, ft/min  |
| Resolution            | 0.01 m/s (1 ft/min)  |
| Pressure              |  |
| Differential pressure | ±3735 Pa (±15 in. H <sub>2</sub> O); 37.5 kPa (150 in. H <sub>2</sub> O), maximum safe operating pressure                |
| Absolute pressure     | 356 to 1016 mm Hg (15 to 40 in. Hg)  |
| Accuracy              | ±2% of reading ±0.025 Pa H <sub>2</sub> O (±0.0001 in.) 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            | 0.001 Pa H <sub>2</sub> O (0.00001 in.) static and differential; 1 mm Hg (0.01 in. Hg) absolute                          |
| Volume                |  |
| Resolution            | 42 to 4250 m <sup>3</sup> /h (25 to 2,500 ft <sup>3</sup> /min) capture hood, supply and return                          |
| Accuracy              | ±3% of reading ±12 m <sup>3</sup> /h (±7 ft <sup>3</sup> /min) at flows >85 m <sup>3</sup> /h (>50 ft <sup>3</sup> /min) |
| Units                 | m <sup>3</sup> /h, ft <sup>3</sup> /min, l/s, m <sup>3</sup> /min  |
| Resolution            | 1 m <sup>3</sup> /h (1 ft <sup>3</sup> /min)   |
| Temperature           |  |
| Sensor in base        | 4.4 to 60°C (40 to 140°F)  |
| Temperature/RH probe  | -10 to 60°C (14 to 140°F)  |
| Accuracy              | ±0.3°C (±0.5°F)  |
| Units                 | °C, °F   |
| Resolution            | 0.1°C (0.1°F)  |

| RH   |   |
|--|---|
| Range  | 5 to 95% RH (temperature/RH probe)  |
| Accuracy                                     | ±3% RH  |
| Resolution                                   | 0.1% RH   |
| Instrument Temperature Range                 |   |
| Operating                                    | 4.4 to 60°C (40 to 140°F)   |
| Storage                                      | -20 to 71°C (-4 to 160°F)   |
| Statistics                                   |   |
| min, max, average and sum                    |   |
| Data Storage                                 |   |
| 26,500 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 adaptor             |   |
| Physical Characteristics                     |   |
| Dimensions (micromanometer only)             | 18.8 cm x 11.4 cm x 5.8 cm (7.4 in. x 4.5 in. x 2.3 in.)  |
| Weight with Batteries                        | PH730 0.5 kg (17 oz.)<br>PH731 3.4 kg (7.4 lb.)   |
| Pressure Connection                          | 6.35 mm (1/4 in.) OD straight ports with barbed ends for use with 4.76 mm (3/16 in.) ID flexible tubing |

| Model   | EBT731-B*   | EBT731   | EBT731-STA  | EBT730             |
|---|---|--|---|--------------------|
| Description   | Basic 2 ft x 2ft (610 mm x 610 mm) EBT Balometer Capture Hood Kit | Standard 2 ft x 2ft (610 mm x 610 mm) EBT Balometer Capture Hood Kit | Bundled 2 ft x 2ft (610 mm x 610 mm) EBT Balometer Capture Hood Kit | Micromanometer Kit |
| Capture hood base, poles, frame and fabric  | ■   | ■  | ■   |                    |
| Micromanometer  | ■   | ■  | ■   | ■                  |
| (4) support poles   | ■   |  |   |                    |
| (6) support poles   |   | ■  | ■   |                    |
| (4) AA alkaline batteries   | ■   |  |   |                    |
| (4) AA rechargeable NiMH batteries  |   | ■  | ■   | ■                  |
| (2) battery holders   | ■   | ■  | ■   | ■                  |
| Multi-country AC power adaptor  |   | ■  | ■   | ■                  |
| 46 cm (18 in.) pitot probe  |   | ■  | ■   | ■                  |
| 5.0 m (16 ft.) tubing   |   | ■  | ■   | ■                  |
| (2) static pressure probes  |   | ■  | ■   | ■                  |
| Neck strap  |   | ■  | ■   | ■                  |
| Capture hood stand  |   |  | ■   |                    |
| Android Tablet loaded with LogDat™ Mobile   |   |  | ■   |                    |
| Wheeled carrying case   | ■   | ■  | ■   |                    |
| Handheld carrying case  |   |  |   | ■                  |
| LogDat™ CH downloading software with cable  | ■   | ■  | ■   | ■                  |
| User manual   | ■   | ■  | ■   | ■                  |
| Calibration certificate, pressure: 5-points (differential), 3-points (barometric), 3-points (temperature) | ■   | ■  | ■   | ■                  |
| Calibration certificate, flow: 7-points (supply), 7-points (return)                                       | ■   | ■  | ■   |                    |

Use the stand and tablet app to do single-person balancing of a system



\*Not available in North America

## 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)   |
| 801216            | 2 ft. x 3 ft. (610 mm x 915 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<br>2 ft. x 4 ft. (610 mm x 1,220 mm) |
| 801207            | 1 ft. x 5 ft. (305 mm x 1,525 mm) and<br>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)   |
| 801215            | 1 ft x 3 ft (305 mm x 915 mm)  |
| 801204 (BSC*)     | 8 in. x 21 in. (205 mm x 535 mm)   |
| 801205 (BSC*)     | 10 in. x 21 in. (255 mm x 535 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

#### EBT731-STA Bundle

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

#### Airflow Probe 800187

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.



#### Temperature and Humidity Probe 800220

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.



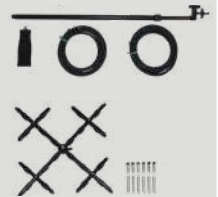
#### Thermoanemometer Air Velocity Probes Models 960, 962, 964, and 966

Available in straight or articulating construction, and with or without a relative humidity sensor. Models with a relative humidity sensor can also calculate wet bulb and dewpoint temperature.



#### Velocity Matrix 801090

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.



### Pitot Probes

|            |                                      |
|------------|--------------------------------------|
| 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 |

\*included in specific bundles. Please refer to model matrix on page 3.

Specifications are subject to change without notice.

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