



Model EBT731 (Accessories shown on following page)

## EBT Balometer<sup>®</sup> Capture Hood Model EBT731

The EBT731 Balometer<sup>®</sup> 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.

# Air Volume Instruments

## **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.



Model EBT730 (Micromanometer shown with standard and optional accessories )

## Detachable Micromanometer Model EBT730

The EBT731 Balometer<sup>®</sup> 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 reconstruction and the second sec
  - 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<sup>™</sup> digital documentation system
- Optional LogDat<sup>™</sup> Mobile Android<sup>™</sup> App connects to the instrument via bluetooth to remotely take readings and datalog measurements for review or export
- 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







## **Air Volume Instruments**

### Models EBT730 and EBT731

## Specifications Models EBT730 and EBT731

#### Velocity Range

| velocity nalige |  |
|-----------------|--|
| 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        | $\pm 3\%$ of reading $\pm 7$ ft/min ( $\pm 0.04$ 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 pressur | 6  |
|----------------------|--|
|                      | ±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             | $\pm 2\%$ of reading $\pm 0.0001$ in. H <sub>2</sub> O ( $\pm 0.025$ Pa) |
| -                    | static and differential; ±2% of reading absolute                         |
| Units                | in. H <sub>2</sub> O, in. Hg, Pa, hPa, kPa, mm Hg,                       |
|                      | $cm Hg, mm H_2O, cm H_2O,$   |
| Resolution           | $0.00001$ in. $H_2O$ ( $0.001Pa$ ) static and                            |
|                      |  |

#### Volume

| Range      | 25 to 2,500 ft <sup>3</sup> /min (42 to 4250 m <sup>3</sup> /h) capture hood       |
|------------|--|
| Accuracy   | $\pm 3\%$ of reading $\pm 7$ ft <sup>3</sup> /min ( $\pm 12$ m <sup>3</sup> /h) at |
|            | flows >50 ft³/min (>85 m³/h)   |
| Units      | ft³/min, m³/h, m³/min, l/s   |
| Resolution | 1 ft³/min (1 m³/h)   |

differential; 0.01 in. Hg (1 mm Hg) absolute

#### RH Range

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

#### Temperature

| 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

40 to 140°F (4.4 to 60°C) Operating 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**

1/4 in. (6.35 mm) OD straight ports with barbed ends for use with <sup>3</sup>/<sub>16</sub> 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<br>rechargeable NiMH batteries, multi-country<br>AC adapter, 18 in. (46 cm) Pitot probe, 2 Static<br>Pressure probes, 16 ft (4.8 m) Neoprene tubing,<br>downloading software, USB interface cable,<br>NIST-traceable calibration certificate, and manual.                         |
|--------|---|
| EBT731 | 2 ft x 2 ft (610 mm x 610 mm) air capture<br>hood/frame/base, manometer, 4 AA size rechargeable<br>NiMH batteries, multi-country AC adapter, 18 in.<br>(46 cm) Pitot probe, 2 Static Pressure probes, 16 ft<br>(4.8 m) Neoprene tubing, wheeled luggage-style<br>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 f | t (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**

| 11000111110114047100 |  |
|----------------------|--|
| 800187               | Air flow probe, 18 in. (46 cm)                         |
| 800220               | 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                             |
| CH-Stand             | Capture Hood Stand                                     |
| LogDat™ Mobile       | Remote reader and data logger Android <sup>™</sup> App |
| -                    | available on Google Play™                              |
|                      |  |

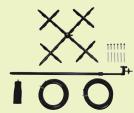
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## **Description / Part Number**

#### 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.

#### **Capture Hood Stand** Stand extends up to 15 ft. 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.

