

EBT Balometer[®] Capture Hood

Model EBT731



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 моdel EBT730 and Capture Hood мodel 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 ₂ O); 37.5 kPa (150 in. H ₂ 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 ₂ O (±0.0001 in.) static and differential; ±2% of reading absolute
Units	in. H ₂ O, in. Hg, Pa, hPa, kPa, mm Hg, cm Hg, mm H ₂ O, cm H ₂ O
Resolution	0.001 Pa H ₂ O (0.00001 in.) static and differential; 1 mm Hg (0.01 in. Hg) absolute
Volume	
Resolution	42 to 4250 m³/h (25 to 2,500 ft³/min) capture hood, supply and return
Accuracy	±3% of reading ±12 m³/h (±7 ft³/min) at flows >85 m³/h (>50 ft³/min)
Units	m³/h, ft³/min, l/s, m³/min
Resolution	1 m³/h (1 ft³/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 Temp	erature 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 adapter				
Physical Characte	eristics			
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.) 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	BIALNOR
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	-	•	•		ALC: NOT
Micromanometer	-	•	•	•	a line of
(4) support poles	•				
(6) support poles		•	•		Use the star
(4) AA alkaline batteries	•				and tablet a
(4) AA rechargeable NiMH batteries		-	•	•	do single-pe balancing of
(2) battery holders	•	•	•	•	a system
Multi-country AC power adaptor		-	•	•	
46 cm (18 in.) pitot probe		•	•	•	
5.0 m (16 ft.) tubing		-	•	•	9
(2) static pressure probes		•	-	-	H C
Neckstrap			•	•	
Capture hood stand			•		- 2-2
Android Tablet loaded with LogDat™ Mobile			•		
Wheeled carrying case	•	•			- I 🛛
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)	•	•	•		Jun)
*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 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)
	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 us	ed to certify Class II bio-safety cabinets

by taking direct in-flow measurements for NSF compliance.

Duct Plugs

634650002 634650003

3/8 in. (9.5 mm) diameter - 5000 pieces

3/8 in. (9.5 mm) diameter - 1000 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.2 (0.09 m2) 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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