PROHOOD™
CAPTURE HOOD
MODEL PH731

AIR VOLUME INSTRUMENTS

The PH731 ProHood™ 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 PH731 ProHood Capture Hood helps you create healthy and energy efficient environments while meeting local codes, guidelines and regulations for ventilation systems.

Model PH731-STA Bundle Shown with Optional Accessories

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
+ Includes Swirl X Flow Conditioner for use with twist or swirl type supply air diffusers
+ 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)

Applications

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

TSI | AIRFLOW
INSTRUMENTS
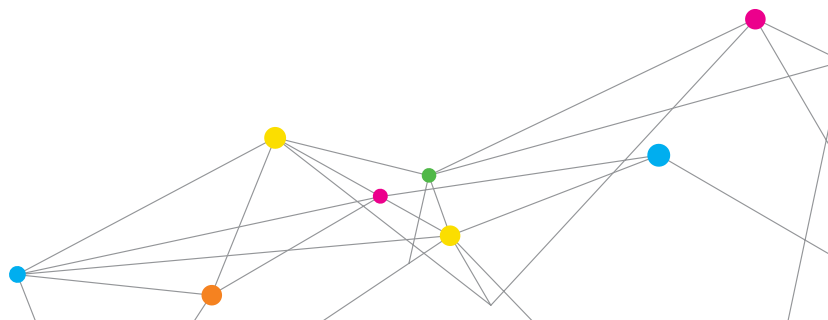
DETACHABLE
MICROMANOMETER
MODEL PH730

AIR VOLUME INSTRUMENTS

The PH731 ProHood Capture Hood includes a detachable PH730 micromanometer–one of the most advanced, versatile, and easy to use micromanometers on the market today. The PH730 features an auto-zeroing pressure sensor that increases measurement resolution and accuracy along with an intuitive menu structure for ease of operation.

Model PH730 (Micromanometer shown with standard and optional accessories)

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
+ Optional LogDat™ Mobile Android™ 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

Plug and play thermoanemometer probes enables use in multiple applications.

SPECIFICATIONS

Capture Hood Model PH731 and Detachable Micromanometer Model PH730

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

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

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

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)

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
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)	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

Standard Accessories	
Capture Hood Model PH731	Micromanometer Model PH730
+ Wheeled luggage-style carrying case + 610 mm x 610 mm (2 ft x 2 ft) air capture hood/frame/base + Detachable micromanometer + AA rechargeable NiMH batteries (qty = 4) + Multi-country AC adapter + 46 cm (18 in.) pitot probe + Static pressure probes (qty = 2) + 4.8 m (16 ft) neoprene tubing + Down-loading software + USB interface cable + NIST-traceable calibration certificate + Product manual	+ Micromanometer carry case + AA rechargeable NiMH batteries (qty = 4) + Multi-country AC adapter + 46 cm (18 in.) pitot probe + Static pressure probes (qty = 2) + 4.8 m (16 ft) neoprene tubing + Down-loading software + USB interface cable + NIST-traceable calibration certificate + Product manual

SPECIFICATIONS

Recommended Optional Accessories
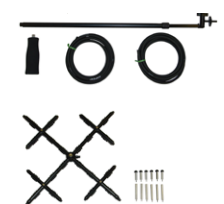
Hood Kits

801097 (standard)	610 mm x 610 mm (2 ft x 2 ft)
801200	305 mm x 1220 mm (1 ft x 4 ft)
801201	610 mm x 1220 mm (2 ft x 4 ft)
801202	305 mm x 1525 mm (1 ft x 5 ft)
801203	915 mm x 915 mm (3 ft x 3 ft)
801206	305 mm x 1,220 mm (1 ft x 4 ft) and 610 mm x 1,220 mm (2 ft x 4 ft)
801207	305 mm x 1,525 mm (1 ft x 5 ft) and 915 mm x 915 mm (3 ft x 3 ft)
801209	406 mm x 406 mm (16 in. x 16 in.)
801210	133 mm x 1220 mm (5.25 in. x 4 ft)
801211	710 mm x 710 mm (28 in. x 28 in.)
801212	710 mm x 1270 mm (28 in. x 50 in.)
80215	305 mm x 915 mm (1 ft x 3 ft)
801204 (BSC*)	205 mm x 560 mm (8 in. x 22 in.)
801205 (BSC*)	255 mm x 560 mm (10 in. x 22 in.)

*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	9.5 mm (3/8 in.) diameter - 1000 pieces
634650003	9.5 mm (3/8 in.) 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 PH731 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.

PH731 Bundle

PH731-STA Bundle
Includes: PH731 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, 46 cm (18 in.). 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 230-990 mm (9-39 in.). Used for measuring inside of duct work. Can be inserted into a standard 8 mm (5/16 in.) diameter hole typically use for pitot traverses with the ability to calculate wet bulb and dewpoint temperatures.

Thermoanemometer Air Velocity Probes

Model 960
Straight air velocity and temperature probe

Model 962
Articulating air velocity and temperature probe

Model 964
Straight air velocity, temperature and humidity probe with ability to calculate wet bulb and dewpoint temperature

Model 966
Articulating air velocity, temperature and humidity probe with ability to 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 0.09 m² (1 ft²) and averages the air velocity while minimizing the effects of turbulence to produce a stale reading.

Pitot Probes

634634000	8 mm-30 cm (5/16-12 in.) diameter
634634001	8 mm-46 cm (5/16-18 in.) diameter
634634002	8 mm-61 cm (5/16-24 in.) diameter
634634003	8 mm-91 cm (5/16-36 in.) diameter
634634005	8 mm – 152 cm (5/16-60 in.) diameter

Specifications subject to change without notice.

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