PROHOOD™
AIR CAPTURE HOOD
MODEL PH731

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.

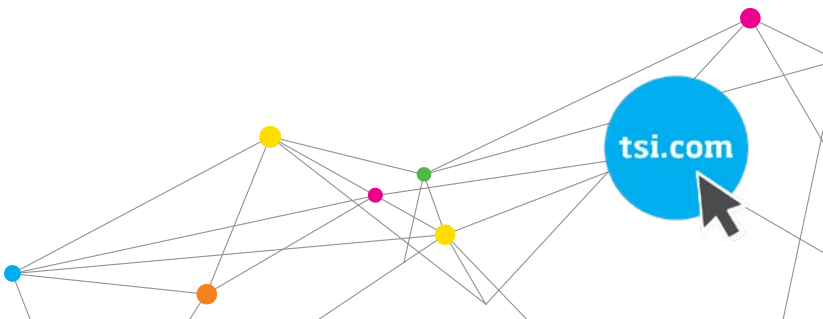
Features and Benefits

+ 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 4,5m (15 ft.)

Applications

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

TSI® AIRFLOW™ INSTRUMENTS



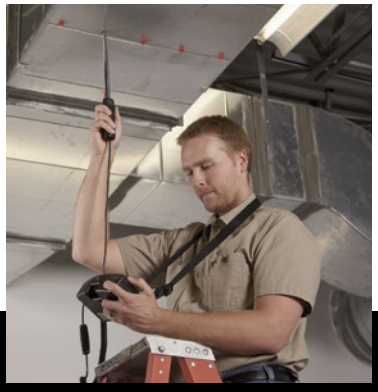
DETACHABLE MICROMANOMETER MODEL PH730

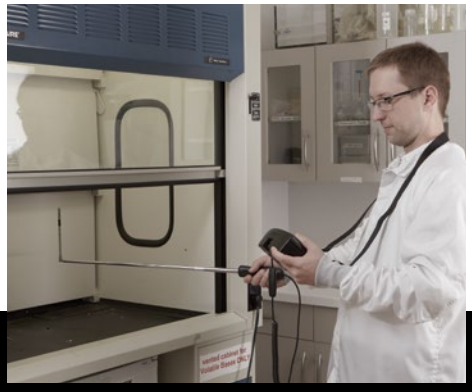
The PH731 ProHood Capture Hood includes a detachable PH730 micromanometer–one of the most advanced, versatile, and easy to use micromanometers on the market today. The PH730 features an auto-zeroing pressure sensor that increases measurement resolution and accuracy along with an intuitive menu structure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

PROHOOD™ CAPTURE HOOD MODEL PH731
DETACHABLE MICROMANOMETER MODEL PH730

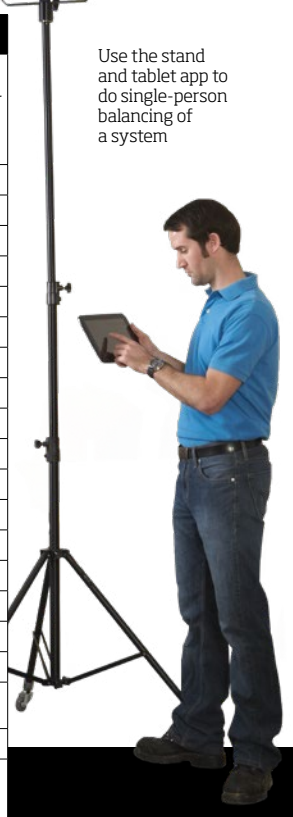
Velocity Range	
Pitot probes	0.125 to 78 m/s (25 to 15,500 ft/min)
Air flow probe	0.125 to 12.5 m/s (25 to 2,500 ft/min)
Velocity matrix	0.125 to 12.5 m/s (25 to 2,500 ft/min)
Accuracy	±3% of reading ±0.04 m/s (±7 ft/min) at velocities >0.25 m/s (50 ft/min)
Units	m/s, ft/min
Resolution	0.01 m/s (1 ft/min)
Pressure	
Differential pressure	±3735 Pa (±15 in. H_2O); 37.5 kPa (150 in. H_2O), 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	
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 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

Model	PH731-B	PH731	PH731-STA	PH730
Description	Basic 610 mm x 610 mm (2 ft x 2ft) ProHood Capture Hood Kit	Standard 610 mm x 610 mm (2 ft x 2ft) ProHood Capture Hood Kit	Bundled 610 mm x 610 mm (2 ft x 2ft) ProHood 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		+	+	+
Swirl-X flow conditioner*	+	+	+	
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)	+	+	+	

* NOTE: Swirl X included with AirFlow Hoods

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



SPECIFICATIONS

PROHOOD™ CAPTURE HOOD MODEL PH731
DETACHABLE MICROMANOMETER MODEL PH730

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)
801216	610 mm x 915 mm (2 ft x 3 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.)
801215	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

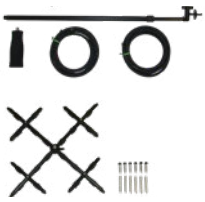
LogDat™ Mobile Software	
LogDat Mobile* Remote reader and data logger Android™ Software App available via Google Play™	

Capture Hood Stand	
CH-Stand* Extends up to 4.5 m (15 ft) 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.	

Optional 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 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 0.09 m^2 (1 ft^2) and averages the air velocity while minimizing the effects of turbulence to produce a stable 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

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

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