

AirPro® Micromanometer Instruments

Mobile App, Feature Sets, and Micromanometer



AirPro[®] Micromanometer Instruments are rugged, compact, configurable and highly accurate measurement devices featuring a Micromanometer (AP800), Mobile Application Software, and Feature Sets (Basic, Advanced and Professional).

AirPro® Micromanometer Model AP800 measures static and differential pressures with seamless connection to smart devices, utilizing Bluetooth® Low Energy (BLE). Data is shown on an integrated display on the instrument while simultaneously being communicated wirelessly, in real-time, to the AirPro® Mobile Application Software running on your mobile Android™ or iOS® handheld device. Instrument features are enabled remotely based on user preference and subscription level.

Applications

- HVAC commissioning and troubleshooting
- Testing and balancing
- Pitot tube duct traverses
- Static pressure measurements
- Differential pressure measurements

Features and Benefits

- Calculates velocity when used with a pitot tube
- Auto zeros pressure sensor upon instrument startup
- Barbed pressure ports to securely attach tubing
- High contrast display eases viewing in dimly lit areas
- Measure differential and static pressures from -15 to +15 in. H₂O (-3735 to +3735 Pa)
- Long life rechargeable Li-ion battery reduces cost of ownership
- Calibration certificate included



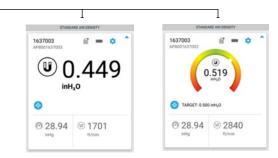
AirPro® Mobile Application Software

The AirPro® Mobile software supports both Android™ or iOS® smart devices and is available in three levels of performance -Basic, Advanced and Professional.



Basic:

- Free download from App Store and Google Play
- Auto-connect to the instrument
- Remotely display instrument measurements
- Set target values
- View multiple measurements simultaneously
- Supports multiple languages
- Display measurements in Imperial or metric units





Advanced - Includes Basic Functionality Plus:

- Subscription-based feature set
- Connect up to 2 instruments for simultaneous, real-time display and data logging
- Perform flow rate calculations based on user-input duct size or K-factor
- Calculate wet bulb and dewpoint temperatures (probe dependent)
- Log measurements to smart device
- Export data with comments and photos for report generation





Professional - Includes Basic and Advanced Functionality Plus:

- Subscription-based feature set
- Connect up to 6 instruments for simultaneous, real-time display and data logging
- Built in duct traverse workflow supporting both Equal Area and log-Tchebycheff test methods
- Supports an optional SD card for use in long- or short-term unattended data logging applications



Function	AirPro Feature Sets		
	Basic	Advanced (1 Year/Long-Term)	Professional (1 Year/Long-Term)
Display Multiple Measurements Simultaneously	•	•	•
Supports Multiple Languages	-	-	•
Configure for Imperial or Metric Units of Measurements	•	•	•
Calculate Pitot Probe Velocity	-	-	•
Standard or Actual Velocity Calculation	-	•	•
Max # of Instruments Connected to AirPro Mobile Simultaneously	1	2	6
Volumetric Flow Rate Calculation (Kf or Pitot Probe)		•	•
Statistics		•	•
Data Logging		•	•
Export Data		•	-
Enable Utilization of Instruments SD Card Slot for Data Storage			•
Graphing			•
Duct Traverse Application			•
Online Access to Calibration Certificates			•



AirPro® Meter and Measurement Probes (Models AP500, VT-S, VT-A, VTH-S, VTH-A and TH-S)

Model AP800 Includes: -

Instrument, calibration certificate, quick start guide, universal AC/DC adapter, battery, service and registration cards.



Carrying Case

Small carrying case; capable of holding 1 meter,

1 probe, 3 extensions plus accessories

800535 Large carrying case; capable of holding 2 meters,

2 probes, 3 extensions plus accessories



Static Pressure Probes and Tubing Kit -

800533 Static Pressure Probes and Tubing Kit; contains

two static pressure probes and two 4 ft. (1.2 m)

lengths of tubing



Pitot Probes -

634634000	Pitot probe (5/16" (8 mm) diameter) - 12" (30 cm)
634634001	Pitot probe (5/16" (8 mm) diameter) - 18" (46 cm)
634634002	Pitot probe (5/16" (8 mm) diameter) - 24" (61 cm)
634634003	Pitot probe (5/16" (8 mm) diameter) - 36" (91 cm)
634634005	Pitot probe (5/16" (8 mm) diameter) - 60" (152 cm)
634634004	Telescoping pitot probe - 8" to 38" (20 cm to 96 cm)

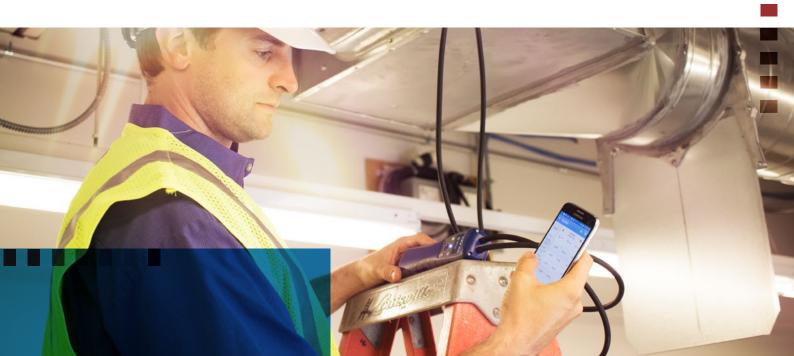


Miscellaneous

800530 External battery charger

634650002 Duct plug, 3/8" (9.5 mm) diameter - 1000 pieces 634650003 Duct plug, 3/8" (9.5 mm) diameter - 5000 pieces





Specifications

AirPro® Micromanometer Instruments

Model AP800 and Accessories

Static / Differential Pressure

Range¹ $-15 \text{ to } +15 \text{ in. } \text{H}_2\text{O}$

(-28.0 to +28.0 mm Hg, -3735 to +3735 Pa)

Accuracy $\pm 1\%$ of reading ± 0.005 in. H_2O

(±0.01 mm Hg, ±1 Pa)

Resolution 0.001 in. H_2O (0.1 Pa, 0.01 mm Hg)

Velocity (Pitot Probe)

Range² 250 to 15500 ft/min (1.27 to 78.7 m/s) Accuracy³ ±1.5% at 2000 ft/min (10.16 m/s)

Resolution 1 ft/min (0.1 m/s)

Barometric Pressure (AP800)

Range 20.36 to 36.65 in. Hg

(517.1 to 930.9 mm Hg)

Accuracy ±2% of reading

Instrument Temperature Range

Operating 40 to 113°F (5 to 45°C) Storage -4 to 140°F (-20 to 60°C)

Display interface

Organic light-emitting diode (OLED)

0.4 in. (10 mm) digit height

External Meter Dimensions

2.1 in. x 7.1 in. x 1.6 in. (53 mm x 181 mm x 40 mm)

Meter Weight

Weight with batteries: 0.45 lbs (0.20 kg)

Power Requirements

AirPro Li-ion

battery 3500 mAh

AC Adapter (TSI part number 800531 only) Input 90 to 240 VAC, 50 to 60 Hz

Output 5 VDC, 2A

Battery Life

32+ hours

Specifications are subject to change without notice

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 USA
 Tel: +1 800 874 2811
 India
 Tel: +91 80 67877200

 UK
 Tel: +44 149 4 459200
 China
 Tel: +86 10 8219 7688

 France
 Tel: +33 1 41 19 21 99
 Singapore
 Tel: +65 6595 6388

 Germany
 Tel: +49 241 523030

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 $^{^{1}}$ Overpressure range = 7 psi (190 in. $H_{2}O$, 360 mmHg, 48 kPa).

² Pressure velocity measurements are not recommended below 1,000 ft/min (5 m/s).

 $^{^{\}rm 3}$ Accuracy is a function of converting pressure to velocity. Conversion accuracy improves when actual pressure values increase.