



UNDERSTANDING, ACCELERATED

AirPro™

# 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 (AP-MOBILE), and Feature Sets (APFS-B, APFS-A and APFS-P).

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.

## 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. H<sub>2</sub>O (-3735 to +3735 Pa)
- + Long life rechargeable Li-ion battery reduces cost of ownership
- + Calibration certificate included



# AIRPRO MOBILE (MODEL AP-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.

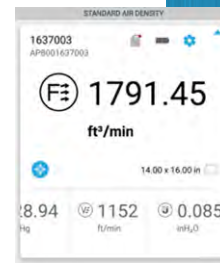
## Basic

- + 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



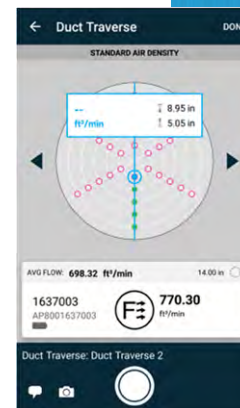
## Advanced - Includes Basic Functionality Plus:

- + 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:

- + 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 (APFS-B)	Advanced (APFS-A)	Professional (APFS-P)
Display Multiple Measurements Simultaneously	X	X	X
Supports Multiple Languages	X	X	X
Configure For Imperial or Metric Units of Measurements	X	X	X
Calculate Pitot Probe Velocity	X	X	X
Standard or Actual Velocity Calculation	X	X	X
Max # of Instruments Connected to AirPro Mobile Simultaneously	1	2	6
Volumetric Flow Rate Calculation (Kf or Pitot Probe)		X	X
Statistics		X	X
Data Logging		X	X
Export Data		X	X
Enable Utilization of Instruments SD Card Slot for Data Storage			X
Graphing			X
Duct Traverse Application			X
Online Access to Calibration Certificates			X

# AIRPRO MICROMANOMETER MODEL AP800 AND ACCESSORIES

## Model AP800 Includes:

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

### Carrying Case

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

Range <sup>1</sup>	-15 to +15 in. H <sub>2</sub> O (-28.0 to +28.0 mm Hg, -3735 to +3735 Pa)
Accuracy	±1% of reading ±0.005 in. H <sub>2</sub> O (±0.01 mm Hg, ±1 Pa)
Resolution	0.001 in. H <sub>2</sub> O (0.1 Pa, 0.01 mm Hg)

### Velocity (Pitot Probe)

Range <sup>2</sup>	250 to 15500 ft/min (1.27 to 78.7 m/s)
Accuracy <sup>3</sup>	±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 36.648 in. Hg (517.15 to 930.87 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

<sup>1</sup> Overpressure range = 7 psi (190 in. H<sub>2</sub>O, 360 mmHg, 48 kPa).

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

<sup>3</sup> Accuracy is a function of converting pressure to velocity. Conversion accuracy improves when actual pressure values increase.

Specifications are subject to change without notice.

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