

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



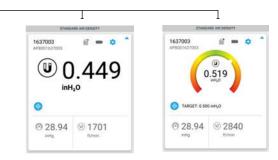
AirPro® Mobile Application Software

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



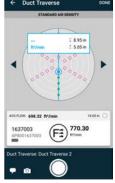


Professional - Includes Basic and Advanced Functionality Plus:

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

(-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

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

Specifications are subject to change without notice

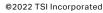
Android is a trademark of Google LLC.

Bluetooth is a registered trademark owned by the Bluetooth SIG, Inc. $\,$

iOS is a registered trademark or trademark of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

AirPro, TSI, and the TSI logo are registered trademarks of TSI Incorporated in the United States and may be protected under other country's trademark registrations.

P/N 5001806 (A4) Rev E



 $^{^{2}}$ 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.