



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_2O (-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

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



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1637003

0

1637003

0

8.94

inH₂O

6 - 0

14.00 x 16.00 in

8.95 in

770.30 (F≇)

@1152 @0.085

(F#) 1791.45

ft³/min

Duct Traverse

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 ¹	-15 to +15 in. H ₂ 0
	(-28.0 to +28.0 mm Hg, -3735 to +3735 Pa)
Accuracy	±1% of reading ±0.005 in. H ₂ 0 (±0.01 mm Hg, ±1 Pa)
Resolution	0.001 in. H ₂ 0 (0.1 Pa, 0.01 mm Hg)

Velocity (Pitot Probe)

Range ²	250 to 15500 ft/min (1.27 to 78.7 m/s)
Accuracy ³	±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

¹ Overpressure range = 7 psi (190 in. H20, 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.

Specifications are subject to change without notice.

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