



Knowledge Beyond Measure.

AirPro® Air Velocity Instruments

Mobile App, Feature Sets, Velocity Meter,
and Measurement Probes



AirPro® Air Velocity Instruments are rugged, compact, configurable and highly accurate measurement devices featuring a Velocity Meter (AP500), Mobile Application Software, user-defined Measurement Probes (VT-S, VT-A, VTH-S, VTH-A and TH-S) and Feature Sets (Basic, Advanced and Professional).

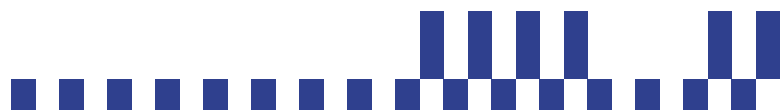
Measurements are taken via trusted thermohygrometer or thermoanemometer technology, displayed locally at the meter and simultaneously transmitted, via Bluetooth®, to your mobile Android™ or iOS® handheld device for use with AirPro® Mobile Application Software. Instrument features are enabled remotely based on user preference and subscription level.

Applications

- HVAC testing and balancing
- Clean room testing
- Biological safety cabinet and laboratory fume hood testing
- HVAC commissioning and troubleshooting
- Ventilation evaluations
- Face velocity measurements

Features and Benefits

- Multiple plug and play probe configurations available
- Stackable probe extensions allow for additional reach
- High contrast display eases viewing in dimly lit areas
- Best-in-class air velocity accuracy
- Long life rechargeable Li-ion battery reduces cost of ownership
- Calibration certificate included
- True single-hand operation



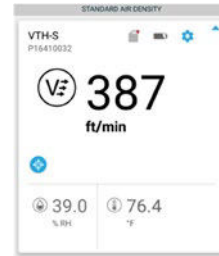
AirPro® Mobile Application Software

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
- 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	▪	▪	▪
Volumetric Flow Rate Calculation		▪	▪
Standard or Actual Velocity Calculation	▪	▪	▪
Max # of Instruments Connected to AirPro Mobile Simultaneously	1	2	6
Wet Bulb and Dewpoint Temperature Calculation (Probe Dependent)		▪	▪
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 AP500 Includes:

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



Thermoanemometers:

- VT-S Air Velocity and Temperature - Straight Probe
- VT-A Air Velocity and Temperature - Articulated Probe
- VTH-S Air Velocity, Temperature, and Humidity - Straight Probe
- VTH-A Air Velocity, Temperature, and Humidity - Articulated Probe



* All probes include calibration certificate and protective case

Thermohygrometer:

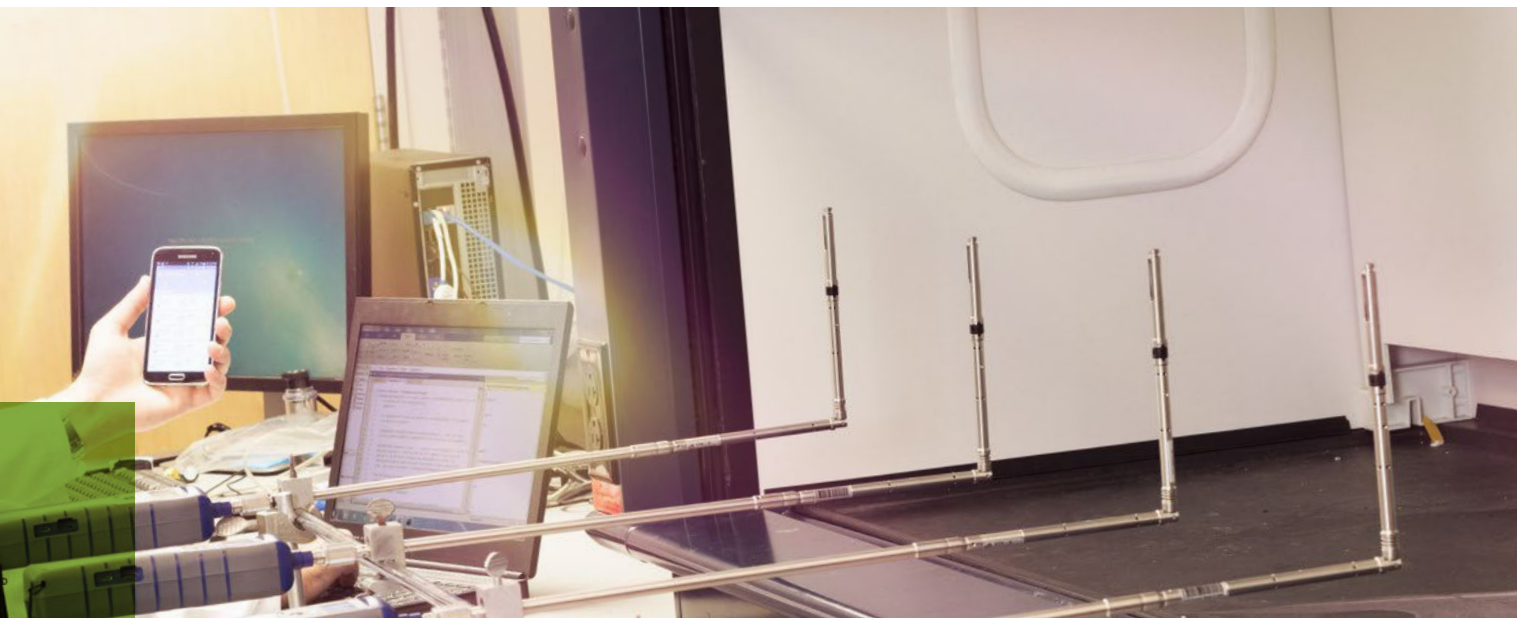
- TH-S Temperature and Humidity - Straight Probe



* Includes calibration certificate and protective case

Accessories:

- 800529 AP500 Probe Extension - 12 in. (305mm), quantity (1)
- 800534 Small carrying case; capable of holding one meter, 1 probe, 3 extensions plus accessories.
- 800535 Large carrying case; capable of holding 2 meters, 2 probes, 3 extensions plus accessories.
- 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® Air Velocity Instruments

Model AP500, VT-S, VT-A, VTH-S, VTH-A, and TH-S

Model AP500

Barometric Pressure

Range	20.36 to 36.65 in. Hg (517.1 to 930.9 mm Hg)
Accuracy	±2% of reading

Instrument Temperature Range

Operating (Electronics)	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 8.5 in. x 1.6 in. (53 mm x 181 mm x 40 mm)

Meter Weight with Batteries

0.5 lbs. (0.23 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

8+ hours at 100 ft/min (0.5 m/s) and 77°F (25°C)

AirPro® Measurement Probes

Velocity (VT-S, VT-A, VTH-S, VTH-A)

Range	0 to 6,000 ft/min (0 to 30 m/s)
Accuracy ^{1&2}	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater
Resolution	1 ft/min (0.01 m/s)

Temperature (VT-S, VT-A, VTH-S, VTH-A, TH-S)

Range	14 to 150°F (-10 to 65°C)
Accuracy ³	±0.5°F (±0.3°C)
Resolution	0.1°F (0.1°C)

Relative Humidity (VTH-S, VTH-A, TH-S)

Range	5 to 95% RH
Accuracy ⁴	±3% RH
Range	0.1% RH

Straight Probe Dimensions (VT-S, VTH-S, TH-S)

Probe length	12 in. (305 mm)
Probe diameter (largest)	0.375 in. (9.5 mm)

Articulating Probe Dimensions (VT-A, VTH-A)

Probe length	12 in. (305 mm)
Probe diameter (largest)	0.375 in. (9.5 mm)
Articulating section length	6.0 in (15.24 cm)

Probe Extension Dimensions (800529)

Probe length	12 in. (305 mm)
Probe diameter (largest)	0.375 in. (9.5 mm)

¹ Temperature compensated over an air temperature range of 40 to 150°F (5 to 65°C).

² The accuracy statement begins at 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s).

³ Accuracy with instrument case at 77°F (25°C), add uncertainty of 0.05°F/°F (0.03°C/°C) for change in instrument temperature.

⁴ Accuracy with probe at 77°F (25°C). Add uncertainty of 0.1% RH/°F (0.2% RH/°C) for change in probe temperature. Includes 1% hysteresis.

Specifications are subject to change without notice.

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