



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).**

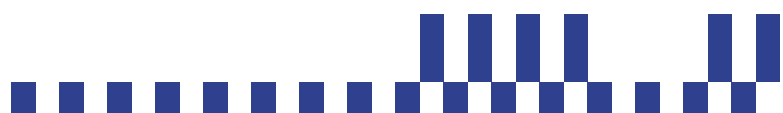
Measurements are taken via trusted thermohygrometer or thermoanemometer technology, displayed locally at the meter and simultaneously transmitted, via Bluetooth®, to your mobile Android™ or iOS® handheld device for use with AirPro® Mobile Application Software. Instrument features are enabled remotely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



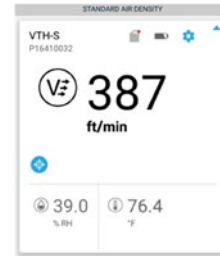
# AirPro® Mobile Application Software

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



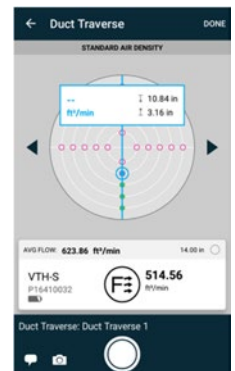
## Advanced – Includes Basic Functionality Plus:

- 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 <sup>1&amp;2</sup>	±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 <sup>3</sup>	±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 <sup>4</sup>	±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)

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

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

<sup>3</sup> 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.

<sup>4</sup> 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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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		