AirPro™ Air Velocity Instruments are rugged, compact, configurable and highly accurate measurement devices featuring a Velocity Meter (AP500), Mobile Application Software (AP-MOBILE), and user-defined Measurement Probes (VT-S, VT-A, VTH-S, VTH-A and TH-S) and Feature Sets (APFS-B, APFS-A and APFS-P).

Measurements are taken via trusted thermohygrometer or anemometer 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.

**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
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
+ 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

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**AirPro Feature Sets**

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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

**Thermohygrometer**
- **TH-S** Temperature and Humidity - Straight Probe

**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**: ±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**: ±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**: ±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)

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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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