



UNDERSTANDING, ACCELERATED

AirPro®

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



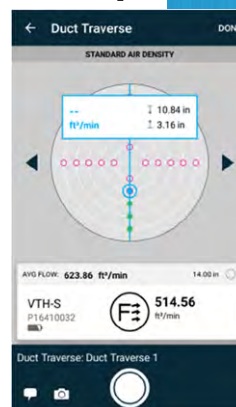
Advanced - Includes Basic Functionality Plus:

- + 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 | X | X | X |
| Supports Multiple Languages | X | X | X |
| Configure for Imperial or Metric Units of Measurements | X | X | X |
| Volumetric Flow Rate Calculation | | X | X |
| Standard or Actual Velocity Calculation | X | X | X |
| Max # of Instruments Connected to Airpro Mobile Simultaneously | 1 | 2 | 6 |
| Wet Bulb and Dewpoint Temperature Calculation (Probe Dependent) | | X | X |
| Statistics | | X | X |
| Data Logging | | X | X |
| Export Data | | X | X |
| Enable Utilization of Instruments SD Card Slot for Data Storage | | | X |
| Graphing | | | X |
| Duct Traverse Application | | | X |
| Online Access to Calibration Certificates | | | X |

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



Thermo hygrometer

- 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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