



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 (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 themoanemometer 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



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
- + 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

Function	AirPro Feature Sets		
	Basic (APFS-B)	Advanced (APFS-A)	Professional (APFS-P)
Display Multiple Measurements Simultaneously	X	Х	Х
Supports Multiple Languages	Χ	Х	X
Configure for Imperial or Metric Units of Measurements	X	Х	Х
Volumetric Flow Rate Calculation		Х	Х
Standard or Actual Velocity Calculation	Х	Х	Х
Max # of Instruments Connected to Airpro Mobile Simultaneously	1	2	6
Wet Bulb and Dewpoint Temperature Calculation (Probe Dependent)		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









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

20.36 to 36.65 in. Hg Range (517.1 to 930.9 mm Hg)

Accuracy ±2% of reading

Instrument Temperature Range

40 to 113°F (5 to 45°C) Operating (Electronics) 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)

90 to 240 VAC, 50 to 60 Hz Input

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)

0 to 6,000 ft/min (0 to 30 m/s) Range ±3% of reading or ±3 ft/min Accuracy¹⁸² (±0.015 m/s), whichever is greater

1 ft/min (0.01 m/s) Resolution

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

14 to 150°F (-10 to 65°C) Accuracy³ ±0.5°F (±0.3°C)

Resolution 0.1°F (0.1°C)

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

5 to 95% RH Range ±3% RH Accuracy⁴ 0.1% RH Range

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

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

Specifications are subject to change without notice.

Bluetooth is a registered trademark owned by the Bluetooth SIG, Inc.

AirPro is a trademark, and TSI and the TSI logo are registered trademarks of TSI Incorporated.



TSI Incorporated - Visit our website **www.tsi.com** for more information.

USA Tel: +1 800 874 2811 India Tel: +91 80 67877200 UK Tel: +44 149 4 459200 Tel: +86 10 8219 7688 China France Tel: +33 1 41 19 21 99 **Singapore Tel:** +65 6595 6388 Tel: +49 241 523030 Germany

P/N 5001784 Rev B ©2017 TSI Incorporated Printed in U.S.A.

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