



Velometer™ Thermal Anemometers

Models AVM410, AVM430, and AVM440



Model AVM440

TSI® Velometer™ Thermal Anemometers

Model AVM410

The Model AVM410 is a solid choice for a digital Air Velocity Meter, without compromising accuracy or precision. Excellent for troubleshooting HVAC systems and conducting commissioning work.

Models AVM430 and AVM440

Models AVM430 and AVM440 are like having multiple meters for the price of one, yet they are simple to operate. Purchase instruments with a straight or articulated probe – all in one compact package.

Features and Benefits

Models AVM410, AVM430 and AVM440

- Accurate air velocity measurement
- Large, easy to read display
- Calibration certificate included

Models AVM430 and AVM440

- Simultaneously measures temperature, velocity and flow
- Displays up to three measurements simultaneously
- Calculates volumetric flow, and actual/standard velocity
- Articulated probe versions available
- Measures humidity (AVM440), dewpoint and wet bulb temperature

Applications

- HVAC system performance
- Commissioning
- Plant maintenance
- Critical environment certification
- Duct traverses
- Face velocity measurement



Specifications

Velometer™ Thermal Anemometers

Models AVM410, AVM430 and AVM440

Velocity

Range (AVM410)	0 to 4,000 ft/min (0 to 20 m/s)
Range (AVM430, AVM440)	0 to 6,000 ft/min (0 to 30 m/s)
Accuracy (AVM410) ^{1&2}	±5% of reading or ±5 ft/min (±0.025 m/s), whichever is greater
Accuracy (AVM430, AVM440) ^{1&2}	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater
Resolution	1 ft/min (0.01 m/s)

Duct Size (AVM430, AVM440)

Dimensions	1 to 250 inches in increments of 0.1 in. (1 to 635 cm in increments of 0.1 cm)
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Volumetric Flow Rate (AVM430, AVM440)

Range	Actual range is a function of velocity and duct size
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Temperature

Range (AVM410, AVM430)	0 to 200°F (-18 to 93°C)
Range (AVM440)	14 to 140°F (-10 to 60°C)
Accuracy ³	±0.5°F (±0.3°C)
Resolution	0.1°F (0.1°C)

Relative Humidity (AVM440 only)

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

Wet Bulb Temperature (AVM440 only)

Range	40 to 140°F (5 to 60°C)
Resolution	0.1°F (0.1°C)

Dew Point (AVM440 only)

Range	5 to 120°F (-15 to 49°C)
Resolution	0.1°F (0.1°C)

Instrument Temperature Range

Operating (Electronics)	40 to 113°F (5 to 45°C)
AVM410 Operating (Probe)	0 to 200°F (-18 to 93°C)
AVM 430 Operating (Probe)	0 to 200°F (-18 to 93°C)
AVM440 Operating (Probe)	14 to 140°F (-10 to 60°C)
Storage	-4 to 140°F (-20 to 60°C)

Data Storage Capabilities (AVM430, AVM440)

Range	12,700+ samples and 100 test IDs
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Logging Interval (AVM430, AVM440)

1 second to 1 hour

Time Constant (AVM430, AVM440)

0.6 lbs. (0.27 kg)

External Meter Dimensions

3.3 in. x 7.0 in. x 1.8 in. (8.4 cm x 17.8 cm x 4.4 cm)

Meter Weight with Batteries

0.6 lbs. (0.27 kg)

Probe Dimensions

Probe Length	40 in. (101.6 cm)
Probe Diameter of Tip	0.28 in. (7.0 mm)
Probe Diameter of Base	0.51 in. (13.0 mm)

Articulating Probe Dimensions

Articulating Section Length	7.8 in. (19.8 cm)
Diameter of Articulating Knuckle	0.38 in. (9.7 mm)

Power Requirements

Four AA-size batteries or AC adapter

	AVM410	AVM430, AVM430-A	AVM440, AVM440-A
Velocity range 0 to 4,000 ft/min (0 to 20.00 m/s)	■		
Velocity range 0 to 6,000 ft/min (0 to 30.00 m/s)		■	■
Temperature	■	■	■
Flow		■	■
Humidity, wet bulb, dew point			■
Probe	Straight	Straight or -A articulated	Straight or -A articulated
Variable time constant		■	■
Manual data logging		■	■
Auto save data logging			■
Statistics		■	■
Review data		■	■
Certificate of Calibration	■	■	■

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 4,000 ft/min. (0.15 m/s through 20 m/s) for the Model AVM410, and 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s) for Models AVM430 and AVM440.

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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