

# VELOMETER® THERMAL ANEMOMETERS MODELS AVM410, AVM430, AND AVM440

## 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

The Model 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.



Model AVM440

## Features and Benefits (Models AVM410, AVM430 and AVM440)

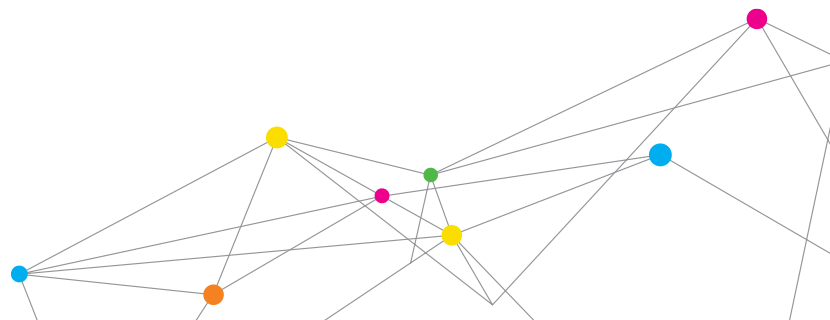
- + Accurate air velocity measurement
- + Large, easy to read display
- + Calibration certificate included

## Features and Benefits (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
- + Data logging and LogDat2™ downloading software included
- + 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) <sup>1&amp;2</sup>	±5% of reading or ±5 ft/min (±0.025 m/s), whichever is greater
Accuracy (AVM430, AVM440) <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)

### 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 <sup>3</sup>	±0.5°F (±0.3°C)
Resolution	0.1°F (0.1°C)

### Relative Humidity (AVM440 only)

Range	5 to 95% RH
Accuracy <sup>4</sup>	±3% RH
Resolution	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
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### Time Constant (AVM430, AVM440)

User selectable
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### 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)
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### Meter Weight with Batteries

0.6 lbs. (0.27 kg)
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### 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
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	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		+	+
LogDat2 downloading software		+	+
Certificate of Calibration	+	+	+

<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 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.

<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.

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Specifications subject to change without notice.



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