ENERGY AND COMFORT

Ventilation Test Instruments

Model 9545

VelociCalc® Air Velocity Meters

Models 9535, 9535-A, 9545 and 9545-A

The Models 9535 and 9545 air velocity meters are like having multiple meters—for the price of just one. These meters simultaneously measure and data log several ventilation parameters using a single probe with multiple sensors. Both models measure velocity, temperature and calculate flow. The Model 9545 also measures relative humidity, and calculates dew point, and wet bulb temperature. Models 9535 and 9545 have telescopic straight probes; Models 9535-A and 9545-A have telescopic articulated probes.

Features and Benefits

- Simple to operate
- Accurate air velocity measurement
- Simultaneously measure temperature and velocity
- Displays up to three measurements simultaneously
- Measures humidity (Model 9545 and 9545-A)
- Calculates volumetric flow and actual/standard velocity
- Data log 12,700+ samples and 100 test IDs
- LogDat2™ downloading software included
- Articulated probe versions available (9535-A and 9545-A)

Applications

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

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Specifications

VelociCalc Models 9535 and 9545

Velocity

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)

Duct Size

Dimensions 1 to 250 inches in increments of 0.1 in. (1 to 635 cm in increments of 0.1 cm)

Volumetric Flow Rate

Range Actual range is a function of velocity and duct size

Temperature

Range (9535 and 9535-A)
0 to 200 °F (-18 to 93°C)
Range (9545 and 9545-A)
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 (9545 only)

Range 0 to 95% RH
Accuracy[4] ±3% RH
Range 0.1% RH

Instrument Temperature Range

Operating (Electronics)
40 to 113°F (5 to 45°C)
Model 9535 Operating (Probe)
0 to 200°F (-18 to 93°C)
Model 9545 Operating (Probe)
14 to 140°F (-10 to 60°C)
Storage -4 to 140°F (-20 to 60°C)

Data Storage Capabilities

Range 12,700+ samples and 100 test IDs

Logging Interval

1 second to 1 hour

Time Constant

User selectable

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)

Meter 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. (19.7 cm)
Diameter of Articulating Knuckle
0.38 in. (9.5 mm)

Power Requirements

Four AA-size batteries or AC adapter

	9535, 9535-A	9545, 9545-A
Velocity	•	•
Temperature	•	•
Flow	•	•
Humidity, wet bulb, dew point		•
Probe	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	•	•

[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.

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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