VELOCICALC®
AIR VELOCITY METERS
MODELS 9515, 9535, 9535-A, 9545 AND 9545-A

The dependable TSI VelociCalc® Air Velocity Meters measure air velocity and temperature. Models are available to calculate flow rate, perform statistical calculations, and measure humidity with dew point and wet bulb temperature conversions.



Model 9545

The Model 9515 is an economical choice for a digital air velocity meter, without compromising accuracy or precision. Professionals find them to be the ideal tool for face velocity measurements in fume hoods, spray booths, or ventilation system checks.

The Models 9535 and 9545 Air Velocity 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.

Applications

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

Features and Benefits

+ Accurate air velocity measurement
+ Easy to read display
+ Simple to operate
+ Calibration certificate included

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

+ Simultaneously measure temperature and velocity
+ Displays up to three measurements simultaneously
+ 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)
+ Measures humidity (Model 9545 and 9545-A)

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SPECIFICATIONS

VELOCICALC® AIR VELOCITY METERS
MODELS 9515, 9535, 9535-A, 9545 AND 9545-A

Velocity

Range (9515)	0 to 4,000 ft/min (0 to 20 m/s)
Range (9535 and 9545)	0 to 6,000 ft/min (0 to 30 m/s)
Accuracy (9515)[1&2]	±5% of reading or ±5 ft/min (±0.025 m/s), whichever is greater
Accuracy (9535 and 9545)[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 (9535 and 9545)

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

Volumetric Flow Rate (9535 and 9545)

Range	Actual range is a function of velocity and duct size

Temperature

Range (9515, 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	5 to 95% RH
Accuracy[4]	±3% RH
Range	0.1% RH

Instrument Temperature Range

Operating (Electronics)	40 to 113°F (5 to 45°C)
Models 9515 and 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 (9535 and 9545)

Range	12,700+ samples and 100 test IDs

Logging Interval (9535 and 9545)

1 second to 1 hour

Time Constant (9535 and 9545)

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

	9515	9535, 9535-A	9545, 9545-A
Velocity range 0 to 4000 ft/min (0 to 20.00 m/s)	+		
Velocity range 0 to 6000 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	+	+	+

[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 4000 ft/min. (0.15 m/s through 20 m/s) for the Model 9515, and 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s) for Models 9535 and 9545.
[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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