

ENERGY AND COMFORT

Ventilation Test Instruments



Model 9545

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
- Simple to operate
- Plant maintenance
- Critical environment certification
- Duct traverses

VELOCICALC® Thermal Anemometers

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

The Models 9535 and 9545 thermal anemometers 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.



TRUST. SCIENCE. INNOVATION.

Specifications

VELOCICALC Models 9535 and 9545

Velocity

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

Duct Size

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

Volumetric Flow Rate

Range	Actual range is a function of velocity, and duct size
-------	---

Temperature

Range (9535 and 9535-A)	-17.8 to 93.3°C (0 to 200 °F)
Range (9545 and 9545-A)	-10 to 60°C (14 to 140°F)
Accuracy ³	±0.3°C (±0.5°F)
Resolution	0.1°C (0.1°F)

Relative Humidity (9545 only)

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

Instrument Temperature Range

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

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

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

Meter Weight with Batteries

0.27 kg (0.6 lbs.)

Meter Probe Dimensions

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

Articulating Probe Dimensions

Articulating Section Length	16.26 cm (6.4 in.)
Diameter of Articulating Knuckle	9.5 mm (0.38 in.)

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 -Articulated	Straight or -Articulated
Variable time constant	•	•
Manual data logging	•	•
Auto save data logging	•	•
Statistics	•	•
Review data	•	•
LogDat2 downloading software	•	•
Free Certificate of Calibration	•	•

¹ Temperature compensated over an air temperature range of 5 to 65°C (40 to 150°F).

² The accuracy statement begins at 0.15 m/s through 30 m/s (30 ft/min through 6,000 ft/min).

³ Accuracy with instrument case at 25°C (77°F), add uncertainty of 0.03°C/°C (0.05°F/°F) for change in instrument temperature.

⁴ Accuracy with probe at 25°C (77°F). Add uncertainty of 0.2% RH/°C (0.1% RH/°F) for change in probe temperature. Includes 1% hysteresis.

Specifications are subject to change without notice.

TSI Incorporated - 500 Cardigan Road, Shoreview, MN 55126-3996 USA

USA	Tel: +1 800 874 2811	E-mail: info@tsi.com	Website: www.tsi.com
UK	Tel: +44 149 4 459200	E-mail: tsiuk@tsi.com	Website: www.tsiinc.co.uk
France	Tel: +33 491 95 21 90	E-mail: tsifrance@tsi.com	Website: www.tsiinc.fr
Germany	Tel: +49 241 523030	E-mail: tsigmbh@tsi.com	Website: www.tsiinc.de
Sweden	Tel: +46 8 595 13230	E-mail: tsiab@tsi.com	Website: www.tsi.se
India	Tel: +91 80 41132470	E-mail: tsi-india@tsi.com	
China	Tel: +86 10 8260 1595	E-mail: tsibeijing@tsi.com	



TRUST. SCIENCE. INNOVATION.

Contact your local TSI Distributor or visit our website www.tsi.com for more detailed specifications.