

ENERGY AND COMFORT

## Ventilation Test Instruments



Model 9555

### Features and Benefits

- Best in class accuracy, especially in low flows
- Displays up to 5 measurements simultaneously
- Optional “smart” plug-in probes, including CO<sub>2</sub> and rotating vane probes
- Large graphic display
- Manual or continuous data logging
- TRAKPRO™ and LogDat2™ software included
- Name test IDs meaningful to you
- Bluetooth® printer capability
- Fast calibration and repair service—just send in the probe

### VELOCICALC® Multi-Function Ventilation Meter

#### Series 9555

The Series 9555 are portable, hand held, Multi-Function Ventilation Test Instruments. These instruments are available with or without a differential pressure sensor and are designed to work with a wide range of plug-in probes. The probes allow users to make various measurements by simply plugging in a different probe that has the features and functions best suited for a particular application. They are designed to measure air velocity, temperature, humidity, CO and CO<sub>2</sub>. Calculations include air flow, heat flow, turbulence, wet bulb and dew point temperature.

The probes can be ordered at any time and include a data sheet with certificate of traceability. When its time for servicing, only the probe needs to be returned since all the calibration data is stored within the probe.

### Applications

- HVAC commissioning and troubleshooting
- Clean room certification
- Testing and balancing
- Ventilation evaluations
- Thermal comfort studies
- IAQ investigations
- Process air flow testing



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## Specifications

### VELOCICALC

#### Models 9555, 9555-A, 9555-P, and 9555-X

##### Velocity (TA Probe Models 960 and 962)

Range	0 to 9,999 ft/min (0 to 50 m/s)
Accuracy <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)

##### Velocity (Pitot Tube for Meter Models 9555, 9555-A, 9555-P)

Range <sup>3</sup>	250 to 15,500 ft/min (1.27 to 78.7 m/s)
Accuracy <sup>4</sup>	±1.5% at 2,000 ft/min (10.16 m/s)
Resolution	1 ft/min (0.01 m/s)

##### Velocity (Rotating Vane Probe Model 995)

Range	50 to 6,000 ft/min (0.25 to 30 m/s)
Accuracy	±1% of reading or ±4 ft/min (±0.02 m/s)
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)
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##### Volumetric Flow Rate

Range	Actual range is a function of velocity, pressure, duct size, and K factor)
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##### Temperature (TA Probe Models 964 and 966, IAQ Probe Models 980 and 982)

Range	14 to 140°F (-10 to 60°C)
Accuracy <sup>5</sup>	±0.5°F (±0.3°C)
Resolution	0.1°F (0.1°C)

##### Temperature (TA Probe Models 960 and 962)

Range	0 to 200°F (-18 to 93°C)
Accuracy <sup>5</sup>	±0.5°F (±0.3°C)
Resolution	0.1°F (0.1°C)

##### Temperature (Rotating Vane Probe Model 995)

Range	32 to 140°F (0 to 60°C)
Accuracy <sup>5</sup>	±2.0°F (±0.1°C)
Resolution	1.0°F (0.1°C)

##### Relative Humidity (TA Probe Models 964 and 966, IAQ Probe Models 980 and 982)

Range	0 to 95% RH
Accuracy <sup>6</sup>	±3% RH
Resolution	0.1% RH

##### Carbon Monoxide (IAQ Probe with CO Model 982)

Range	0 to 500 ppm
Accuracy <sup>7</sup>	±3% of reading or ±3 ppm, whichever is greater
Resolution	0.1 ppm

##### Carbon Dioxide (IAQ Probe Models 980 and 982)

Range	0 to 5000 ppm
Accuracy <sup>8</sup>	±3% of reading or ±50 ppm, whichever is greater
Resolution	1 ppm

##### Static/Differential Pressure (Probe for Meter Models 9555, 9555-A, 9555-P)

Range <sup>9</sup>	-15 to +15 in. H <sub>2</sub> O (-28.0 to +28.0 mm Hg, -3735 to +3735 Pa)
Accuracy	±1% of reading ±0.005 in. H <sub>2</sub> O (±0.01 mm Hg, ±1 Pa)
Resolution	0.001 in. H <sub>2</sub> O (1 Pa, 0.01 mm Hg)

##### Barometric Pressure

Range	2.036 to 36.648 in. Hg (517.15 to 930.87 mm Hg)
Accuracy	2% of reading

##### Instrument Temperature Range

Operating (Electronics)	40 to 113°F (5 to 45°C)
Storage	-4 to 140°F (-20 to 60°C)

##### Data Storage Capabilities

Range	26,500+ samples and 100 test IDs
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##### Logging Interval

1 second to 1 hour
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##### Time Constant

User selectable
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##### External Meter Dimensions

3.8 in. x 8.3 in. x 2.1 in. (9.7 cm x 21.1 cm x 5.3 cm)
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##### Meter Weight with Batteries

0.8 lbs. (0.36 kg)
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##### 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
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**Optional Probes for VELOCiCALc 9555 Series Multi-Functional Anemometers**  
(see specifications above)

Model	Probe Description
960	Air Velocity and Temperature, straight probe
962	Air Velocity and Temperature, articulating probe
964	Air Velocity, Temperature, and Humidity, straight probe
966	Air Velocity, Temperature, and Humidity, articulating probe
995	100 mm Rotating Vane probe
792	Surface Temperature probe
794	Air Temperature probe
980	Indoor Air Quality probe
982	Indoor Air Quality probe, with CO



	9555	9555-A	9555-P	9555-X
Probe that measures velocity, temperature, and humidity	straight	articulated	optional	optional
Pressure measurement	•	•	•	
Calculates flow, wet bulb, dew point, standard/actual	•	•	optional	optional
Optional velocity and temperature probe	•	•	•	•
Optional rotating vane probe	•	•	•	•
Optional IAQ probes (CO <sub>2</sub> , temperature, humidity, CO)	•	•	•	•
Data Logging (manual, auto save continuous)	•	•	•	•
Data logging software	•	•	•	•
Optional Bluetooth printer	•	•	•	•
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 9,999 ft/min (0.15 m/s through 50 m/s).

<sup>3</sup> Pressure velocity measurements are not recommended below 1000 ft/min (5 m/s) and are best suited to velocities over 2,000 ft/min (10.00 m/s). Range can vary depending on barometric pressure.

<sup>4</sup> Accuracy is a function of converting pressure to velocity. Conversion accuracy improves when actual pressure values increase.

<sup>5</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>6</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.

<sup>7</sup> At 77°F (25°C). Add uncertainty of ±0.2%/°F (0.36%/°C) for change in temperature.

<sup>8</sup> At calibration temperature. Add uncertainty of ±0.28%/°F (0.5%/°C) for change in temperature.

<sup>9</sup> Overpressure range = 190 in. H<sub>2</sub>O (360 mmHg, 48 kPa).

Specifications are subject to change without notice.

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