

VELOCICALC[®]

Rotating Vane Anemometers

Models 8322 and 8324

TSI's VELOCICALC[®] and VELOCICALC Plus

Rotating Vane Anemometers accurately measure air velocity and temperature, calculate flowrate, perform averaging, and determine minimum and maximum readings. In addition, the Model 8324 provides both single point and continuous data logging capability.

Features and Benefits

- Wide velocity range of 0.25 to 30 m/s
- Temperature range of 0 to 80°C
- 100 mm diameter rotating vane head provides a reliable weighted average of velocity readings
- Sweep mode makes it easy to sweep across an area for one overall measurement
- Sampling function records multiple point measurements
- Statistics function displays average, maximum and minimum values, and the number of recorded samples
- Flowrate feature calculates volumetric flow when the user inputs the duct shape and size
- Variable time constant modes available for a steady display when measuring fluctuating flows
- Optional 91.4 cm telescopic probe with an articulated swivel head
- Optional 35 mm diameter rotating vane head
- Optional portable printer provides hard copy documentation of your readings
- NIST* traceable calibration certificate

Data Logging Features of the Model 8324

- Data logging ability allows user to log 2849 samples with a time and date stamp
- Single point and continuous data logging modes to fit your application
- Data can be reviewed on-screen, printed, and downloaded to a computer spreadsheet program
- TSI downloading software permits easy transfer of data to a computer

Applications

- Heating and cooling coil analysis
- Diffuser and grille measurements
- Fume hood face velocity tests
- Filter face velocity measurements
- Indoor Air Quality tests



Models 8322 and 8324 VELOCICALC

Specifications

Velocity (all models):

Range (100 mm head): 0.25 to 30 m/s (50 to 6,000 ft/min)
Accuracy (100 mm head): $\pm 1.0\%$ of reading or ± 0.015 m/s (± 3 ft/min), whichever is greater

Range (35 mm head): 0.4 to 30 m/s (80 to 6000 ft/min)
Accuracy (35 mm head): $\pm 1.5\%$ of reading or ± 0.025 m/s (± 5 ft/min), whichever is greater

Temperature (all models):

Range: 0 to 80°C (32 to 176°F)
Resolution: 0.1°C (0.1°F)
Accuracy: $\pm 0.5^\circ\text{C}$ ($\pm 1.0^\circ\text{F}$)

Instrument Temperature Range (all models):

Operating (Electronics): 5 to 45°C (40 to 113°F)
Operating (Probe): 0 to 80°C (32 to 176°F)
Storage: -20 to 60°C (-4 to 140°F)

Volumetric Flowrate (all models):

Range¹: 0 to 4,360,000 m³/hr (0 to 1,230,000 l/s, 0 to 2,604,000 ft³/min)

Duct Size (all models):

Range: 1 to 635 cm in increments of 0.1 cm, (1 to 250 inches in increments of 0.1 inches)

Averaging Capability (all models):

Range: Up to 255 values each of velocity, temperature

Logging Capability (Model 8324):

Range: Up to 2849 samples and 1,000 test id's
Intervals: 1 sec, 2 sec, 5 sec, 10 sec, 15 sec, 20 sec, 30 sec, 60 sec, 2 min, 5 min, 10 min, 15 min, 20 min, 30 min, 60 min

Time Constant (all models):

Intervals: 1 sec, 2 sec, 5 sec, 10 sec, 15 sec, 20 sec

External Meter Dimensions (all models):

Size Measurements: 10 cm \times 16.8 cm \times 3.8 cm (3.9 in. \times 6.6 in. \times 1.5 in.)

Vane Head Dimensions (all models):

Standard Head Diameter: 100.0 mm (4.0 in.)
Optional Head Diameter: 35.0 mm (1.4 in.)

Meter Weight Dimensions (all models):

Weight (with batteries): 0.68 kg (1.5 lbs)

Meter Display Dimensions (all models):

Display: 4-digit LCD, 15 mm (0.6 in.) digit height

Power (all models):

Requirements: Four AA-size batteries (included) or AC adapter (optional)

Printer Interface:

Type: Serial
Baud Rate: 1200

	Velocity	Temperature	Volumetric Flowrate	Sweep Mode	Averaging Capability	Variable Time Constant	Data Logging/Downloading	Review Data	Printer Output	NIST* Calibration Certificate
8322	●	●	●	●	●	●			●	●
8324	●	●	●	●	●	●	●	●	●	●

*U.S. National Institute of Standards and Technology

¹ Actual range is a function of maximum velocity and duct size.
Specifications are subject to change without notice.



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