



Thermal Anemometers

Models TA410, TA430 and TA440

Model TA440



Model TA410

The Model TA410 is a solid choice for a digital Air Velocity Meter, without compromising accuracy or precision. Excellent for troubleshooting HVAC systems and conducting commissioning work.

Features and Benefits

- Accurate air velocity measurement
- Large, easy to read display
- Calibration certificate included

Additional Features and Benefits (Models TA430 and TA440)

- Simultaneously measures temperature and velocity
- Displays up to three measurements simultaneously
- Calculates volumetric flow, and actual/standard velocity
- Articulated probe versions available
- Measures humidity (TA440), wet bulb, and dewpoint temperature

Models TA430 and TA440

The Models TA430 and TA440 are like having multiple meters for the price of one, yet they are simple to operate. Purchase instruments with a straight or articulated probe—all in one compact package.

Applications

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



Specifications

Thermal Anemometers

Models TA410, TA430 and TA440

Velocity

Range (TA410)	0 to 20 m/s (0 to 4,000 ft/min)
Range (TA430, TA440)	0 to 30 m/s (0 to 6,000 ft/min)
Accuracy (TA410) ^{1&2}	±5% of reading or ±0.025 m/s (±5 ft/min), whichever is greater
Accuracy (TA430, TA440) ^{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 (TA430, TA440)

Dimensions	1 to 635 cm in increments of 0.1 cm (1 to 250 inches in increments of 0.1 in.)
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Volumetric Flow Rate (TA430, TA440)

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

Range (TA410, TA430)	-18 to 93°C (0 to 200°F)
Range (TA440)	-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 (TA440 only)

Range	5 to 95% RH
Accuracy ⁴	±3% RH
Resolution	0.1% RH

Wet Bulb Temperature (TA440 only)

Range	5 to 60°C (40 to 140°F)
Resolution	0.1°C (0.1°F)

Dew Point (TA440 only)

Range	-15 to 49°C (5 to 120°F)
Resolution	0.1°C (0.1°F)

Instrument Temperature Range

Operating (Electronics)	5 to 45°C (40 to 113°F)
Model TA410, TA430	
Operating (Probe)	-18 to 93°C (0 to 200°F)
Model TA440	
Operating (Probe)	-10 to 60°C (14 to 140°F)
Storage	-20 to 60°C (-4 to 140°F)

Data Storage Capabilities (TA430, TA440)

Range	12,700+ samples and 100 test IDs
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Logging Interval (TA430, TA440)

1 second to 1 hour

Time Constant (TA430, TA440)

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	19.7 cm (7.8 in.)
Diameter of Articulating Knuckle	9.5 mm (0.38 in.)

Power Requirements

Four AA-size batteries or AC adapter

	TA410	TA430, TA430-A	TA440, TA440-A
Velocity range 0 to 20.00 m/s (0 to 4000 ft/min)	■		
Velocity range 0 to 30.00 m/s (0 to 6000 ft/min)		■	■
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		■	■
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 30 ft/min through 4000 ft/min (0.15 m/s through 20 m/s) for the Model TA410, and 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s) for Models TA430 and TA440.

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.

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USA
India

Tel: +1 800 874 2811
Tel: +91 80 67877200

China
Singapore

Tel: +86 10 8219 7688
Tel: +65 6595 6388