Thermo-Anemometer with IR Thermometer

FEATURES

- Simultaneous display or air flow (or velocity) and ambient temperature.
- Large backlit LCD display shows air flow (or velocity), probe temperature, and remote surface temperature (IR feature). Also displays units of measurement and user alerts.
- 20-point averaging for air flow and velocity.
- 3% velocity accuracy using a low-friction ball bearing vane wheel.
- Data and MIN/MAX hold feature.
- Selectable auto shutdown.
- Includes a vane sensor with a 1.2m cable.
- IR thermometer feature measures remote surface temperatures to 932° F (500° C) with a 30:1 distance-to-spot ratio and laser pointer.
- Up to 8 programmable dimensions (ft squared or cm squared) can be stored in internal memory.

KEYPAD BUTTONS

⏻ = Power ON or OFF.

IRT = Press and hold to measure remote surface temperature.

MAX/MIN = Press to record and store the highest, lowest, and continuous moving average readings for a single point. This button also functions as the left scroll button when in Area mode.

UNITS = Press to select the mode of operation. In Flow mode, the meter displays air volume; in Velocity mode, the meter displays air speed. This button also functions as the UP scroll button when in Area mode.

APPLICATIONS

- HVAC installation, repair, diagnostics, and optimization
- Fume hood testing, installation, and verification
- Ventilation system installation, servicing, and analysis
- Environmental wind and temperature testing/ analysis
- Boiler rooms
- Ionizer flow output monitoring
- Plant/Facilities Maintenance

KEYPAD BUTTONS CONT'D

AVG = Press to obtain an average reading for multiple points in Flow mode or Velocity mode. Up to 20 points can be averaged.

AREA = Press and hold to enter into the Area mode (ft^2 or m^2) in CFM (ft^3/min) or CMM (m^3/min) modes. When recording MAX/MIN/AVG readings for a single point, press the Area button to clear previous readings.

HOLD = Press once to freeze the displayed reading. Press again to unlock display.

= Press to turn ON the backlight. Press again to turn OFF.

MAX/MIN (TEMPERATURE) = Press to record and store the highest and lowest readings for probe temperature.

HOLD (TEMPERATURE) = Press to freeze the displayed reading for probe temperature. Press again to unlock display.

SPECIFICATIONS

Air Velocity	Range	Resolution	Accuracy
m/s	0.40—30.00	0.01	±3% ±0.20 m/s
ft/min	80—5900	1	±3% ±40 ft/min
km/h	1.4—108.0	0.1	±3% ±0.8 km/h
MPH	0.9—67.0	0.1	±3% ±0.4 MPH
Knots	0.8—58.0	0.1	±3% ±0.4 knots

Air Flow	Range	Resolution	Area
CFM	0-999900	0.001	0-999.9 ft^2
CMM	0-999900	0.001	0-999.9 m^2

Air Temperature	Range	Resolution	Accuracy
	14-140°F (-10-60°C)	0.1°F/C	±4.0°F (2.0°C)

Infrared Temperature	Range	Resolution	Accuracy
	-58 to -4°F (-50 to -20 °C)	0.1°F/C	±9.0°F (5.0°C)
	-4 to 932°F (-20 to 500°C)	0.1°F/C	±2% reading or ±4°F (2°C)

CFM(ft^3/min)=Air Velocity(ft/min)XArea(ft^2)

CMM(m^3/min)=Air Velocity(m/s)XArea(m^2)X60

CFM: cubic feet per minute

CMM: cubic meters per minute

	m/s	ft/min	km/h	MPH	knot
1 m/s	1	196.87	3.60	2.24	1.944
1 ft/min	0.00508	1	0.01829	0.01138	0.00987
1 km/h	0.2778	54.69	1	0.6222	0.54
1 MPH	0.4464	87.89	1.6071	1	0.8679
1 knot	0.5144	101.27	1.8519	1.1523	1

OPERATING INSTRUCTIONS

MEASURING AIR VELOCITY AND AIR FLOW (SINGLE POINT)

1. Press ⏻ to power ON the thermo-anemometer. It will show a full display when first powered ON.

2. The anemometer is ready for use when **VEL** or **FLOW** display in the middle of the LCD, and temperature displays in the upper left corner.

CONTINUOUS MOVING AVERAGE

1. Place the vane sensor in front of the air flow source to be measured.

2. Press the **MAX/MIN** button until AVG displays on the bottom of the LCD. The display will show the moving average and the unit will record the reading every second.

NOTE: The anemometer will display continuous moving average readings for up to ten hours.

MAX/MIN/AVG READING ON A SINGLE POINT

1. Place the vane sensor in front of the air flow source to be measured.

2. Press the **MAX/MIN** button until AVG displays on the bottom of the LCD. The display will show the moving average and the unit will record the reading every second.

3. Press the **HOLD** button before moving the vame sensor away from the air flow source. The unit will record and store the readings.

4. To clear the MAX/MIN/AVG readings, press and hold the **MAX/MIN** button until the unit beeps twice; then release.

AREA SET

1. Press the **UNITS** button and select CFM or CMM.

2. Press and hold the **AREA** button until the unit beeps twice. The LCD will display "AREA" indicating the unit is in the area set mode.

3. Press the **MAX/MIN** button to move the radix point.

4. Press the **HOLD** button to change the position of the flashing digit.

5. Press the **UNITS** button to change the digit which is set to flash.

6. Press and hold the **UNITS** button to exit.

READING REMOTE SURFACE TEMPERATURE USING THE INFRARED THERMOMETER

⚠ **CAUTION: To prevent personal injury, do not stare into the laser beam. (Class 2 laser product.)**

1. Press and hold the **IRT** button to acitvate the laser beam. Aim the beam at the surface to be measured. The LCD will display the temperature reading of the surface. Once the laser button is released, the display will return to air flow (or velocity) readings within six seconds.

OPERATING INSTRUCTIONS (CONT'D)

 **POWER ON/OFF
and AUTO SHUTDOWN**

1. Press the power ON/OFF button to turn the meter ON or OFF.

2. **Auto Shutdown:** The meter will automatically turn off after fifteen minutes if no keys are pressed during this time.

3. **Disable Auto Shutdown:** To disable auto shutdown function, press and hold the IRT button as you turn the meter ON. The display will show "disAP0"; then release the IRT button.

NOTE: Automatic Shutdown feature is always disabled when the unit is in "CFM/CMM" or "AVG" mode.

WARRANTY

This product has been produced to provide un-limited service. Should it become inoperable after the user has performed the recommended main-tenance, a no charge repair or replacement will be made to the original purchaser. This applies to all repairable units that have not been damaged or tampered with. The claim must be made within **One Year** of the date of purchase.

MAINTENANCE

REPLACING THE BATTERY

1. The thermometer must be OFF when changing the battery. Press to power OFF the thermometer.

2. On the back side of the thermometer, locate the symbol.

3. While holding the thermometer, place your thumb on the . With gentle pressure push downward and pull backward; the battery cover will begin to open. Use your other hand to grasp the cover and pull downward. Lift the cover up and off.

4. Lift out the 9-volt battery and disconnect it from the connector.

5. Connect a new 9-volt battery and place it into the battery cavity.

6. Replace the battery cover by setting it over the battery and pushing upward until it snaps into place.

7. Dispose of the old battery according to local, state, and federal regulations.

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