

*7 in 1, HVAC/Environment meter*

# Anemometer, CMM/CFM Humidity/Temp. meter

Model : SP-7000

*ISO-9001, CE, IEC1010*



**7 in 1**

**HVAC/Environment meter**

# **Anemometer, CMM/CFM Humidity/Temp. meter**

**Model : SP-7000**

## **FEATURES**

- \* 7 in 1 professional environment instruments:
  - 1. Air velocity/Temp., 2. Humidity/Temp.,
  - 3. CFM, CMM, 4. Dew point, 5. Wet bulb,
  - 6. Wind chill, 7. Heat index,
- \* Tiny bone shape with lightweight and small size case design are suitable for handling with one hand.
- \* Wristlet design provides extra protection to the instrument especially for user one hand operation.
- \* Low-friction ball bearing mounted wheel design provides high accuracy at high and low air velocity.
- \* High precision humidity sensor with fast response time.
- \* Built-in microprocessor circuit assures excellent performance and accuracy.
- \* Concise and compact buttons arrangement, easy operation.
- \* Memorize the maximum and minimum value with recall.
- \* °C/°F detection by pressing button on the front panel.
- \* Hold function to freeze the current reading value.

## **GENERAL SPECIFICATIONS**

Display	8 mm LCD display
Measurement	1. Air velocity/Temp. 2. Humidity/Temp. 3. CFM, CMM 4. Dew point 5. Wet bulb 6. Wind chill 7. Heat index
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50° C (32 to 122° F)
Over Input Display	Indication of " - - - "
Power Supply	CR 2032 DC 3V battery
Power Consumption	Approx. DC 5 mA
Weight	160g (battery included)
Dimension	HWD 120 x 45 x 20 mm (4.7 x 1.8 x 1.2 inch).
Standard Accessory	Instruction Manual

## **ELECTRICAL SPECIFICATION ( 23 ± 5°C )**

### **Air velocity**

Unit	Range	Resolution	Accuracy
ft/min	80 to 3937 ft/min	1 ft/min	
m/s	0.4 to 20.0 m/s	0.1 m/s	± 3% F.S. @ F.S. : full scale
km/h	1.4 to 72.0 km/h	0.1 km/h	
MPH	0.9 to 44.7 mile/h	0.1 MPH	
knots	0.8 to 38.8 knots	0.1 knots	
Temp.	0 to 50 °C	0.1 °C	
	32 to 122 °F	0.1 °F	

**Remark :**

ft/min : feet per minute      MPH : miles per hour  
 m/s : meters per second      knots : nautical miles per hour  
 km/h : kilometers per hour

### **Humidity/Temp.**

Unit	Range	Resolution	Accuracy
% RH	10 to 95 %RH	0.1 %RH	< 70% RH : ± 4 %RH ≥ 70% RH : ± ( 4 %rdg + 1.2 %RH )
Temp.	0 to 50 °C	0.1 °C	± 1.2 °C
	32 to 122 °F	0.1 °F	± 2.5 °F

### **Ar flow**

Unit	Range	Resolution
CMM	0.024 to 36000	0.001/0.01/0.1/1
CFM	0.847 to 1271300	0.001/0.01/0.1/1/10 (x10)/100 (x100)

### **Dew point Temp.**

Unit	Range	Resolution	Remark
°C	-25.3 to 49.0 °C	0.1 °C	* Calculate from the humidity/Temp. value
°F	-13.5 to 120.0 °F	0.1 °F	

*Please refer to [http://en.wikipedia.org/wiki/Dew\\_point](http://en.wikipedia.org/wiki/Dew_point)*

### **Wet bulb Temp.**

Unit	Range	Resolution	Remark
°C	-5.4 to 49.0 °C	0.1 °C	* Calculate from the humidity/Temp. value
°F	22.2 to 120 °F	0.1 °F	

*Please refer to [http://en.wikipedia.org/wiki/Wet-bulb\\_temperature](http://en.wikipedia.org/wiki/Wet-bulb_temperature)*

### **Wind chill**

Unit	Range	Resolution	Accuracy
°C	-9.4 to 44.2 °C	0.1 °C	± 2.0 °C
°F	15.0 to 112.0 °F	0.1 °F	± 3.6 °F

*\* Wind chill value is effect only when the Temp. value < 15 °C and Air velocity value > 1.4 m/s.*

*\* Please refer to [http://en.wikipedia.org/wiki/Wind\\_chill](http://en.wikipedia.org/wiki/Wind_chill)*

### **Heat index**

Unit	Range	Resolution	Accuracy
°C	0 to 100.0 °C	0.1 °C	± 2.0 °C
°F	32 to 212 °F	0.1 °F	± 3.6 °F

*Please refer to [http://en.wikipedia.org/wiki/Heat\\_index](http://en.wikipedia.org/wiki/Heat_index)*

### **Effects of the heat index (shade values)**

Celsius	Fahrenheit	Notes
27- 32 °C	80- 90 °F	Caution :  Fatigue is possible with prolonged exposure and activity. Continuing activity could result in heat cramps
32- 41 °C	90- 105 °F	Extreme caution :  Heat cramps, and heat exhaustion are possible. Continuing activity could result in heat stroke
41- 54 °C	105- 130 °F	Danger :  Heat cramps, and heat exhaustion are likely ; heat stroke is probable with continued activity
over 54 °C	over 130 °F	Extreme danger : Heat stroke is imminent

*Note : Exposure to full sunshine can increase heat index values by up to 8 °C (14°F).*