# Anemometer, CMM/CFM Humidity/Temp. meter

Model: SP-7000 *ISO-9001, CE, IEC1010* 





The Art of Measurement

# HVAC/Environment meter

# Anemometer, CMM/CFM Humidity/Temp. meter

Model: SP-7000

#### **FEATURES**

	*	7 in 1 professional environment instruments:		
	1. Air velocty/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.		
ĺ	*	Wristlet design provides extra protection to the		

- instrument especially for user one hand operation.

  \* Low-friction ball bearing mounted wheel design
- 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**

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

#### 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.
km/h	1.4 to 72.0 km/h	0.1 km/h	@ F.S. : full scale
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 ℃	0.1 ℃	
	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
			<i>≧70% RH :</i>
			± ( 4 %rdg +1.2 %RH)
Temp.	0 to 50 ℃	0.1 ℃	± 1.2 ℃
	32 to 122 °F	0.1 °F	± 2.5 °F

#### Ar flow

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

# Dew point Temp.

Unit	Range		Resolution	Remark
$^{\circ}\!\mathbb{C}$	-25.3 to 49.0 ℃		0.1 ℃	* Calculate from the
$^{\circ}\mathrm{F}$	-13.5 to 120.0 °F		0.1 °F	humidity/Temp. value
Please refer to http://en.wikipedia.org/wiki/Dew_point				

#### Wet bulb Temp.

Unit		Range	Resolution	Remark
$^{\circ}$ C		-5.4 to 49.0 ℃	0.1 ℃	* Calculate from the
°F		22.2 to 120 °F	0.1 °F	humidity/Temp. value
Please refer to http://en.wikipedia.org/wiki/Wet-bulb_temperature				

# Wind chill

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

<sup>\*</sup> Wind chill value is effect only when the Temp. value < 15  $^{\circ}$ C and Air velocity value > 1.4 m/s.

# Heat index

Unit	Range	Resolution	Accuracy
$^{\circ}\!\mathbb{C}$	0 to 100.0 ℃	0.1 ℃	± 2.0 ℃
°F	32 to 212 °F	0.1 °F	± 3.6 °F
Pleas refer to http://en.wikipedia.org/wiki/Heat_index			

# Effects of the heat index (shade values)

Ellect2	Effects of the fleat fildex (shade values)					
Celsius Fahrenheit		Notes				
27− 32 ℃	80– 90 °F	Caution :				
		Fatigue is possible with prolonged exposure				
		and activity. Continuing activity could result in				
		heat cramps				
32− 41 ℃	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 ℃	over 130 °F	Extreme danger: Heat stroke is imminent				
Note : Ex	posure to full	sunshine can increase heat index values by up				
to 8 °C ( 14°F ).						

<sup>\*</sup> Appearance and specifications listed in this brochure are subject to change without notice.

<sup>\*</sup> Please refer to http://en.wikipedia.org/wiki/Wind\_chill