11 in 1, Anemometer, Humidity meter, Barometer Light Meter, Altitude, Pt 1000 Temp. (optional)

# Sport/Weather meter

# ENVIRONMENT METER

Model: SP-9201 *ISO-9001, CE, IEC1010* 









The Art of Measurement

Anemometer, Humidity meter, Barometer Light Meter, Altitude. Pt 1000 Temp. (optional) Sport/Weather meter

# **ENVIRONMENT METER**

Model: SP-9201

#### **FEATURES**

- 11 in 1 professional environment instruments:
- 1. Air velocty/Temp., 2. Humidity/Temp., 3. Light
- 4. Barometer, 5. CFM, CMM, 6. Dew point,
- 7. Wet bulb, 8. Wind chill, 9. Heat index,
- 10. Altitude, 11. Pt 1000 ohm Temp.( optional )
- 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
- Exclusive photo diode and color correction filter
- light sensor, spectrum meets C.I.E. photopic. High precision humidity sensor with fast response time
- Build in baro sensor for the atomsphere value and altitude measurement precisely.
- Optional Pt 1000 ohm Temp. probe for the prcision Temp. measurement.
- 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	y 8 mm LCD display	
Measurement	Air velocty/Temp.	
	2. Humidity/Temp.	
	3. Light	
	4. Barometer	
	5. CFM, CMM	
	6. Dew point	
	7. Wet bulb	
	8. Wind chill	
	9. Heat index	
	10. Altitude	
	11. Pt 1000 ohm Temp.( optional )	
Operating	Max. 80% RH.	
Humidity		
Operating	0 to 50° C (32 to 122° F)	
Temperature		
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		
Optional	Pt 1000 ohm Temp. probe, TP-1000	
Accessories		

### 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

# \* Appearance and specifications listed in this brochure are subject to change without notice.

# Light \* auto range

Unit	Range	Resolution	Accuracy		
Lux	0 to 2,200 Lux	1 Lux	± 5% rdg ± 8 dgt		
	1,800 to 20,000 Lux	10 Lux			
Ft-cd	0 to 204.0 Fc	0.1 Ft-cd			
	170 to 1,860 Fc	1 Ft-cd			
Remar	Remark · Ft-cd · feet candle				

# Barometric pressure (Barometer)

Unit	Range	Resolution	Accuracy
hPa	10.0 to 999.9	0.1 hpa	± 1.5 hPa
	1000 to 1100	1 hpa	± 2 hPa
mmHg	7.5 to 825.0	0.1 mmHg	± 1.2 mmHg
inHq	0.29 to 32.48	0.01 inHg	± 0.05 inHq

### Pt 1000 ohm Thermometer ( optional probe )

Unit	Range	Resolution	Accuracy
$^{\circ}\!\mathbb{C}$	-10.0 to 70.0 ℃	0.1 ℃	± 1.2 ℃
°F	14.0 to 158.0 °F	0.1 °F	± 2.5 °F

# Air 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
$^{\circ}\!\mathbb{C}$	-25.3 to 49.0 ℃	0.1 ℃	* Calculate from the
°F	-13.5 to 120.0 °F	0.1 °F	humidity/Temp. value

# 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	Please refer to http://en.wikipedia.org/wiki/Wet-bulb_temperature				

### Heat index

Unit	Range	Resolution	Accuracy		
°C	0 to 70.0 ℃	0.1 ℃	± 2.0 ℃		
°F	32 to 158 °F	0.1 °F	± 3.6 °F		
Pleas	Pleas refer to http://en.wikipedia.org/wiki/Heat_index				

# Effects of the heat index (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 :		
Exposure to full sunshine can increase heat index values by up to		

8 °C (14°F).

# Wind chill

$^{\circ}\!\mathbb{C}$	-9.4 to 44.2 ℃	0.1 ℃	± 2.0 ℃
°F	15.0 to 112.0 °F	0.1 °F	± 3.6 °F

Air velocity value > 1.4 m/s.

Please refer to http://en.wikipedia.org/wiki/Wind\_chill

# Altitude

Unit	Range	Resolution	Accuracy
m	-2000 to 9000 m	1 m	± 15 m
ft	-6000 to 30000 ft	1 ft	± 50 ft