

9 in 1, Anemometer, Humidity meter, Light meter Light Meter,  
Pt 1000 Temp. ( optional )

# Sport/Weather meter ENVIRONMENT METER

Model : SP-8001

ISO-9001, CE, IEC1010

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02-2389-0101



**Lutron**

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*The Art of Measurement*

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## FEATURE

- \* 9 in 1 professional environment instruments: 1. Air velocity/Temp., 2. Humidity/Temp., 3. Light 4. CFM, CMM, 5. Dew point, 6. Wet bulb, 7. Wind chill, 8. Heat index, 9. 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.
- \* Optional Pt 1000 ohm Temp. probe for the precision 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 SPECIFICATION

Display	8 mm LCD display
Measurement	1. Air velocity/Temp., 2. Humidity/Temp., 3. Light 4. CFM, CMM, 5. Dew point, 6. Wet bulb, 7. Wind chill, 8. Heat index, 9. Pt 1000 ohm Temp. ( optional )
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
Optional Accessories	Pt 1000 ohm Temp. probe, TP-1000

## ELECTRICAL SPECIFICATIONS (23± 5 °C)

Air velocity

Unit	Range	Resolution	Accuracy
ft/min	80 to 3937 ft/min	1 ft/min	± 3% F.S. @ F.S. : full scale
m/s	0.4 to 20.0 m/s	0.1 m/s	
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

#### 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)

#### 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 ± 2.5 °F
	32 to 122 °F	0.1 °F	

#### 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	
Remark : Ft-cd : feet candle			

#### 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 <a href="http://en.wikipedia.org/wiki/Dew_point">http://en.wikipedia.org/wiki/Dew_point</a>			

#### 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 <a href="http://en.wikipedia.org/wiki/Wet-bulb_temperature">http://en.wikipedia.org/wiki/Wet-bulb_temperature</a>			

#### 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 <a href="http://en.wikipedia.org/wiki/Wind_chill">http://en.wikipedia.org/wiki/Wind_chill</a>			

#### 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 ).

Pt 1000 ohm Thermometer ( optional probe )

Unit	Range	Resolution	Accuracy
°C	-10.0 to 70.0 °C	0.1 °C	± 1.2 °C
°F	14.0 to 158.0 °F	0.1 °F	± 2.5 °F

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

SP-8001+1201

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