

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

*Sport/Weather meter*

# ENVIRONMENT METER

Model : SP-8002

ISO-9001, CE, IEC1010



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

**9 in 1**  
**Anemometer, Humidity/Temp. meter,**  
**UV Light meter, Pt 1000 Temp. ( optional )**  
**Sport/Weather meter**

# ENVIRONMENT METER

Model : SP-8002

## FEATURES

- \* 9 in 1 professional environment instruments:  
 1. Air velocity/Temp., 2. Humidity/Temp., 3. UV 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 light weight 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.
- \* UV sensor structure The exclusive UV photo sensor with the cosine correction filter.
- \* 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 SPECIFICATIONS

Display	8 mm LCD display
Measurement	1. Air velocity/Temp. 2. Humidity/Temp. 3. UV 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	Instruction Manual
Accessory	
Optional Accessories	Pt 1000 ohm Temp. probe, TP-1000

## ELECTRICAL SPECIFICATION ( 23 ± 5°C )

### Air velocity

Unit	Range	Resolution	Accuracy
ft/min	80 to 3937 ft/min	1 ft/min	≤ 20 m/s : ± 3% F.S. > 20 m/s : ± 4% F.S.
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 32 to 122 °F	0.1 °C 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

### 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)

### 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 32 to 122 °F	0.1 °C 0.1 °F	± 1.2 °C ± 2.5 °F

### UV Light \* auto range \* UVA light measurement

Range	Resolution	Accuracy
0 to 1999 uW/cm <sup>2</sup>	1 uW/cm <sup>2</sup>	± ( 4 % FS + 2 dgt )
2 to 20.00 mW/cm <sup>2</sup>	0.01 mW/cm <sup>2</sup>	FS : full scale

*Remark*  
 \* Calibration is executed under the UVA light & and compare with the standard UVA light meter.  
 \* UV Sensor structure :  
 The exclusive UV photo sensor with the cosine correction filter.  
 \* UV sensor spectrum Band pass 290 nm to 390 nm.

### Pt 1000 ohm Thermometer ( optional probe )

Unit	Range	Resolution	Accuracy
°C	-10.0 to 100.0 °C	0.1 °C	± 1.2 °C
°F	14.0 to 212.0 °F	0.1 °F	± 2.5 °F

### 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)*

### 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

*Plas 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 ).

### Wind chill

Unit	Range	Resolution	Accuracy
°C	-0.4 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)

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