

*Light, Humidity, Air velocity*

*Air flow, Type Ktemp. ....9 in 1*

# ENVIRONMENT METER

**Model : EM-1900**

**ISO-9001, CE, IEC1010**



**Lutron**



**LUTRON ELECTRONIC**

*The Art of Measurement*

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# ENVIRONMENT METER

Model : EM-1900

## FEATURES

* 9 in 1 professional environment instruments: 1. Air velocity/Temp., 2. Humidity/Temp., 3. Light meter 4. Air flow, 5. Dew point, 6. Wet bulb, 7. Wind chill, 8. Heat index, 9. Type K Temp.(optional probe)
* 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.
* High precision humidity sensor with fast response time.
* Built in baro sensor for the atmosphere value and altitude measurement precisely.
* 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. Light meter 4. Air flow 5. Dew point 6. Wet bulb 7. Wind chill 8. Heat index 9. Type k Temp.( optional )
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50 °C ( 32 to 122 °F )
Over Input	Indication of "- - - -"
Display	
Power Supply	UM4-AAA X 3 ( DC 4.5 V 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	Type K Temp. probe : TP-01 , TP-02A , TP-03 , TP-04

## Electrical Specification ( 23 ±5 °C )

### Anemometer

#### A. Air velocity

Unit	Range	Resolution	Accuracy
ft/min	80 to 3937 ft/min	1 ft/min	≤ 20 m/s : ±3% F.S. Max. : 25 m/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	
<b>Remark :</b>			
ft/min : feet per minute		MPH : miles per hour	
m/s : meters per second		knots : nautical miles per hour	
km/h : kilometers per hour			

#### B. Temperature

Measuring Range	0 °C to 50 °C/32 °F to 122 °F
Resolution	0.1 °C/0.1 °F
Accuracy	±0.8 °C/1.5 °F

#### Air flow

Measurement	Range	Resolution
CMM ( m <sup>3</sup> /min. )	0 to 54,000 CMM	0.001 to 1 CMM
CFM ( ft <sup>3</sup> /min. )	0 to 1,907,000 CFM	0.001 to 100 CFM

Measurement	Area
CMM ( m <sup>3</sup> /min. )	0.001 to 30,000 m <sup>2</sup>
CFM ( ft <sup>3</sup> /min. )	0.01 to 322.93 ft <sup>2</sup>

#### Humidity/Temperature

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

#### Dew Point Temp. ( Humidity )

°C	Range	-25.3 °C to 48.9 °C
	Resolution	0.1 °C
°F	Range	-13.5 °F to 120.1 °F.
	Resolution	0.1 °F.

#### Wet bulb Temp. ( Humidity )

°C	Range	-21.6 °C to 50.0 °C
	Resolution	0.1 °C
°F	Range	-6.9 °F to 122.0 °F.
	Resolution	0.1 °F.

#### Light meter

Measuring Range	LUX	0 to 20,000 LUX.
	Ft-cd	0 to 1,860 Ft-cd
Resolution	LUX	1 LUX
	Ft-cd	0.1 Ft-cd
Accuracy	± ( 5% rdg ± 8 dgt )	
<i>Note: Ft-cd : Feet candle</i>		

#### Type K/J Thermometer

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.0 to 1300.0 °C	± ( 0.4 % + 0.8 °C )
		-50.1 to -100.0 °C	± ( 0.4 % + 1 °C )
	0.1 °F	-58.0 to 2372.0 °F	± ( 0.4 % + 1.5 °F )
Type J	0.1 °C	-58.1 to -148.0 °F	± ( 0.4 % + 1.8 °F )
		-50.0 to 1200.0 °C	± ( 0.4 % + 0.8 °C )
	0.1 °F	-50.1 to -100.0 °C	± ( 0.4 % + 1 °C )
		-58.0 to 2192.0 °F	± ( 0.4 % + 1.5 °F )
		-58.1 to -148.0 °F	± ( 0.4 % + 1.8 °F )

\* Spec. tested under the environment RF Field Strength less than 3 V/M & frequency less than the 30 MHz only.