Sound, Humidity, Light meter, Dew point

Wet bulb, Heat index, Type K temp. .....7 in 1

ENVIRONMENT METER

Model : EM-1910 ***ISO-9001, CE, IEC1010***

Lutron

LUTRON ELECTRONIC

The Art of Measurement

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ENVIRONMENT METER

Model : EM-1910

FEATURES

* 7 in 1 professional environment instruments: 1. Sound level meter., 2. Humidity/Temp., 3. Light meter 4. Dew point, 5. Wet bulb, 6. Heat index, 7. 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.
* 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.
* ℃/℉ detection by pressing button on the front panel.
* Hold function to freeze the current reading value.

General Specifications

Display	14 mm LCD display
Measurement	1. Sound level meter. 2. Humidity/Temp. 3. Dew point 4. Wet bulb 5. Heat index 6. Light meter 7. Type k Temp.(optional)
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50 ℃ (32 to 122 ℉)
Over Input Display	Indication of "- - - - "
Power Supply	UM4-AAA X 3 (DC 4.5 V battery)
Power Consumption	Approx. DC 18 mA
Weight	146 g (meter only)
Dimension	HWD 179 x 57 x 24 mm (7.0 x 2.2 x 0.94 inch).
Standard Accessory	Instruction Manual
Optional Accessories	Type K Temp. probe : TP-01 , TP-02A ,TP-03 , TP-04

Electrical Specification (23 ±5 ℃)

Sound level meter.

Measurement Range	35 - 130 dB.
Resolution	0.1 dB.
Function	Data hold Record (Max., Min.).
Accuracy (23 ±5 ℃)	Characteristics of "A" frequency weighting network meet IEC 61672-2013 class 2 Under 94 dB input signal, the accuracy are :

31.5	Hz	±3.0 dB
63	Hz	±2.0 dB
125	Hz	±1.5 dB
250	Hz	±1.5 dB
500	Hz	±1.5 dB
1 K	Hz	±1.0 dB
2 K	Hz	±2.0 dB
4 K	Hz	±3.0 dB
8 K	Hz	±5.0 dB

Remark :
The above spec. are tested under the environment RF Field Strength less than 3 V/M & frequency less than 30 MHz only.

Frequency	31.5 to 8,000 Hz.
Microphone type	Electric condenser microphone.
Microphone size	Out size, 12.7 mm DIA. (1/2 inch).

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 ℃	0.1 ℃	±1.2 ℃
	32 to 122 ℉	0.1 ℉	±2.5 ℉

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*
℃	-25.3 to 49.0 ℃	0.1 ℃	* Calculate from the humidity/Temp. value
℉	-13.5 to 120.0 ℉	0.1 ℉	

Please refer to http://en.wikipedia.org/wiki/Dew_point

Wet bulb Temp.

Unit	*Range*	*Resolution*	*Remark*
℃	-5.4 to 49.0 ℃	0.1 ℃	* Calculate from the humidity/Temp. value
℉	22.2 to 120 ℉	0.1 ℉	

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

Heat index

Unit	*Range*	*Resolution*	*Accuracy*
℃	0 to 100.0 ℃	0.1 ℃	±2.0 ℃
℉	32 to 212 ℉	0.1 ℉	±3.6 ℉

Pleas refer to http://en.wikipedia.org/wiki/Heat_index

Type K/J thermometer

Sensor Type	*Resolution*	*Range*	*Accuracy*
Type K	0.1 ℃	-50.0 to 1300.0 ℃	± (0.4 % + 0.5 ℃)
		-50.1 to -100.0 ℃	± (0.4 % + 1 ℃)
	0.1 ℉	-58.0 to 2372.0 ℉	± (0.4 % + 1 ℉)
		-58.1 to -148.0 ℉	± (0.4 % + 1.8 ℉)

Effects of the heat index (shade values)

Celsius	Fahrenheit	Notes
27–32 ℃	80–90 ℉	Caution : Fatigue is possible with prolonged exposure and activity. Continuing activity could result in heat cramps
32–41 ℃	90–105 ℉	Extreme caution : Heat cramps, and heat exhaustion are possible. Continuing activity could result in heat stroke
41–54 ℃	105–130 ℉	Danger : Heat cramps, and heat exhaustion are likely ; heat stroke is probable with continued activity
over 54 ℃	over 130 ℉	Extreme danger : Heat stroke is imminent

Note :
Exposure to full sunshine can increase heat index values by up to 8 ℃ (14℉).

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