# 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

www.yalab.com.tw



02-2389-0101

Sound level meter. 35 - 130 dB.

Humidity/Temp. 10 to 95 %RH / 0 to 50  $^{\circ}$ C

Dew point -25.3 to 49.0  $^{\circ}$ C

Wet bulb -5.4 to 49.0 ℃

Heat index 0 to 100.0 °C

Light meter 0 to 20,000 Lux

Type k Temp. -50.0 to 1300.0  $^{\circ}$ C (optional)





The Art of Measurement

#### Sound, Humidity, Light meter, Dew point, Wet bulb, Heat index, Type K temp. .....7 in 1

### **ENVIRONMENT METER**

Model: EM-1910 <u>www.YaLAB.com.tw</u> 02-2389-0101

#### **FEATURE**

- \* 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.
- \*  $^{\circ}$ C/ $^{\circ}$ F detection by pressing button on the front panel.
- \* Hold function to freeze the current reading value.

#### **GENERAL SPECIFICATION**

Display	14 mm LCD display
Measurement	1. Sound level meter.
	2. Humidity/Temp.
	3. Dew point
	4. Wet bulb
	s. Heat index
	6. Light meter
	7. Type k Temp.( optional )
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50 °C ( 32 to 122 °F )
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 SPECIFICATIONS (23 $\pm$ 5 $^{\circ}$ C)

#### Sound level meter.

Measurement Range	35 - 130 dB.
Resolution	0.1 dB.
Function	Data hold
	Record ( Max., Min. ).

Accuracy (23 ±5 °C)	Characteristics of "A" frequency weighting network meet IEC 61672-	
(20 20 0)	2013 class 2 Under 94 dB input signal, the accuracy are :	
	31.5 Hz ±3.0 dB	
	63Hz ±2.0.dB	
	125Hz ±1.5.dB	
	250 Hz ±1.5-dB	
	500Hz ±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 °C	0.1 °C	±1.2 °C
	32 to 122 °F	0.1 °F	±2.5 °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	

<sup>\*\*</sup>Please refer to 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
Ī	°F	22.2 to 120 °F	0.1 °F	

<sup>\*\*</sup>Please refer to 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

<sup>\*\*</sup>Pleas refer to http://en.wikipedia.org/wiki/Heat\_index

#### Type K/J thermometer

Sensor Type	Resolution	Range	Accuracy
Туре К	0.1 °C	-50.0 to 1300.0 °C	± ( 0.4 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.4 % + 1 °C )
	0.1 °F	-58.0 to 2372.0 °F	± ( 0.4 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.4 % + 1.8 °F )

#### **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  $^{\circ}$ C ( 14 $^{\circ}$ F ).

EM-1910+190806

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

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