

Anemometer (CMM, CFM) Humidity meter, Light meter Type K Thermometer

Model : LM-8010

ISO-9001, CE, IEC1010



Lutron



LUTRON ELECTRONIC

The Art of Measurement

Anemometer, Hygrometer, Light Meter, Thermometer

Model : LM-8010

FEATURES

* 5 in 1 professional measuring instrument: Anemometer, Air flow, Hygrometer, Thermometer, and Light meter. 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 thin-film capacitance humidity sensor with fast response to the humidity changes.
* Standard type K (NiCr-NiAl) thermocouple input jack suitable for all kinds of type K probe.
* 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 selectable by pressing button on the front panel.
* Lux/Feet-candle selectable by pressing button on the front panel.
* Air velocity measuring units selectable by pressing button on the front panel for five kinds of units.
* Air flow (CFM. CMM) measurement can set the desired area dimension.
* Multi channel display for relative humidity and temperature measured values or air velocity and temperature measured values at the same time.
* Zero button design makes light meter calibration.
* Hold function to freeze the current reading value.

GENERAL SPECIFICATIONS

Display	8 mm LCD display
Measurement	Anemometer, Humidity, Temperature, Light, Air flow (CFM/CMM).
Operating Humidity	Max. 80% RH.
Operating Temperature	0 to 50° C (32 to 122° F)
Over Input Display	Indication of "- - - -"
Power Supply	006P DC 9V battery (Heavy duty type)
Power Consumption	Approx. DC 6.2 mA
Weight	160g (battery included)
Dimension	<i>HWD</i> : 156x60x33 mm 6.14x2.36x1.29 inch
Standard Accessory	Instruction Manual
Optional Accessories	Carrying case, CA-52A, CA-06. Temperature probe (TP-01, TP-02A, TP-03. TP-04) : TP-01 * Max. short-tern operating Temperature: 300 °C (572 °F). * It is an ultra fast response naked-bead thermocouple TP-02A * Measure Range: -50 °C to 900 °C. * Dimension:10cm tube, 3.2mm Dia. TP-03 * Measure Range: -50 °C to 1200 °C. * Dimension: 10cm tube, 8mm Dia. TP-04 * Surface temperature probe. * Measure Range: -50 °C to 400 °C.

ELECTRICAL SPECIFICATION (23 ± 5°C)

Measurement		Range	Resolution
Air velocity	ft/min	80 to 5,910 ft/min	1 ft/min
	m/s	0.4 to 30.0 m/s	0.1 m/s
	km/h	1.4 to 108.0 km/h	0.1 km/h
	MPH	0.9 to 67.0 mile/h	0.1 MPH
	knots	0.8 to 58.3 knots	0.1 knots
	Temperature (thermister)	32 to 122 °F 0 to 50 °C	0.1 °F 0.1 °C

Measurement		Range	Resolution
Air flow	CMM cube meter/min	54,000 CMM	0.001 to 1 CMM
	CFM cube feet/min	1,908,400 CFM	0.001 to 100 CFM

Measurement		Range	Resolution
Humidity	% RH	10 to 95 %RH	0.1 %RH
	Temperature (thermister)	32 to 122 °F 0 to 50 °C	0.1 °F 0.1 °C

Measurement		Range	Resolution
Light	Lux	0 to 2,200 Lux 1,800 to 20,000 Lux	1 Lux 10 Lux
	* auto range Ft-cd	0 to 204.0 Fc 170 to 2,000 Fc	0.1 Ft-cd 1 Ft-cd

Measurement	Range	Resolution
Temperature (Type K)	-148 to 2,372 °F	0.1 °F
	-100 to 1,300 °C	0.1 °C

Measurement	Range	Accuracy
Air velocity	80 to 5,910 ft/min	$\leq 20 \text{ m/s} : \pm 3\% \text{ F.S.}$ $> 20 \text{ m/s} : \pm 4\% \text{ F.S.}$
	0.4 to 30.0 m/s	
	1.4 to 108.0 km/h	
	0.9 to 67.0 mile/h	
	0.8 to 58.3 knots	
	32 to 122 °F	$\pm 2.5 \text{ °F}$
	0 to 50 °C	$\pm 1.2 \text{ °C}$
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		Ft-cd : feet candle

Measurement	Range	Accuracy
Humidity	10 to 95 %RH	< 70% RH : ± 4 %RH
		≥ 70% RH : : ± (4%rdg + 1.2 %RH)
	32 to 122 °F 0 to 50 °C	± 2.5 °F ± 1.2 °C

Measurement	Range	Accureacy
Light	0 to 20,000 Lux	± 5% rdg ± 8 dgt
	0 to 2,000 Fc	

Measurement	Range	Accuracy
Temperature (Type K)	-148 to 2,372 °F	± (1% rdg + 2°F)
	-100 to 1,300 °C	± (1% rdg + 1°C)

Measurement	Area setting
CMM	0.001 to 30.000 meter square
CFM	0.01 to 322.92 feet square