Anemometer, Anemometer, %RH, Temp., Type K

4 IN 1 METER

Model : LM-8100   *ISO-9001, CE, IEC1010*

![Lutron logo]
LUTRON ELECTRONIC

The Art of Measurement

4 in 1
Anemometer, Humidity meter Light Meter, Thermometer
Model : LM-8100

FEATURES

* 4 in 1 professional measuring instrument: Anemometer, 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 humidity sensor with fast response time.
* 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.
* ℃/℉ detection by pressing button on the front panel.
* Lux/Feet-candle selection by pressing button on the front panel.
* Air velocity measuring units selection by pressing button on the front panel for five kinds of units.
* 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.
* Computer data output interface (RS232/USB).

GENERAL SPECIFICATIONS

Display	LCD display, LCD soze : 41.5 x 31.5 mm.
Measurement	Anemometer, Humidity, Temperature. Light
Operating Humidity Temperature	Max. 80% RH. 0 to 50° C (32 to 122° F)
Over Input Display	Indication of "- - - - "
Data Output	RS 232/USB PC serial interface. *Connect the optional RS232 cable UPCB-02 will get the RS232 plug. *Connect the optional USB cable USB-01 will get the USB plug.
Power Supply	DC 1.5 V battery (UM4, AAA) x 6 PCs, DC 9V adapter input. @ AC/DC power adapter is optional.
Power Consumption	Anemoter : Approx. DC 11 mA. Other functions : Approx. DC 7.5 mA.
Weight	280 g/0.62 LB (battery included).
Dimension	HWD 177 x 70 x 32 mm (7.0x 2.8 x 1.3 inch).
Standard Accessory	Instruction Manual................................. 1 PC
Optional Accessories	Type K Temperature probe, Carrying case USB cable/USB-01, RS232 cable/UPCB-02 Data Acquisition software, SW-U801-WIN AC/DC power adapter.

ELECTRICAL SPECIFICATION (23± 5℃)

Measurement		Range	Resolution
Air velocity	ft/min	80 to 5910 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	32 to 122 ℉	0.1 ℉
	(Semiconductor)	0 to 50 ℃	0.1 ℃

Measurement		Range	Resolution
Humidity	% RH	10 to 95 %RH	0.1 %RH
	Temperature	32 to 122 ℉	0.1 ℉
	(Semiconductor)	0 to 50 ℃	0.1 ℃

Measurement		Range	Resolution
Light	Lux	0 to 2,200 Lux	1 Lux
		1,800 to 20,000 Lux	10 Lux
* auto range	Ft-cd	0 to 204.0 Fc	0.1 Ft-cd
		170 to 1,860 Fc	1 Ft-cd
Temperature (Type K)		-148 to 2372 ℉	0.1 ℉
		-100 to 1300 ℃	0.1 ℃

Measurement	Range	Accuracy
Air velocity	80 to 5910 ft/min	
	0.4 to 30.0 m/s	≦ 20 m/s : ± 3% F.S.
	1.4 to 108.0 km/h	> 20 m/s : ± 4% F.S.
	0.9 to 67.0 mile/h	
	0.8 to 58.3 knots	
	32 to 122 ℉	± 2.5 ℉
	0 to 50 ℃	± 1.2 ℃
Humidity	10 to 95 %RH	< 70% RH : ± 4 %RH ≧70% RH : : ± (4%rdg + 1.2 %RH)
	32 to 122 ℉	± 2.5 ℉
	0 to 50 ℃	± 1.2 ℃
Light	0 to 20,000 Lux	± 5% rdg ± 8 dgt
	0 to 1,860 Fc	
Temperature (Type K)	-148 to 2372 ℉	± (1% rdg + 2℉)
	-100 to 1300 ℃	± (1% rdg + 1℃)

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

OPTIONAL TEMPERATURE PROBE AND OTHER ACCESSORIES

Thermocouple Probe (Type K) TP-01	* Measuring Range : -40 to 250 ℃ (-40 to 482 ℉) * Max. short-term operating temperature: * It's an ultra fast response naked-bead thermocouple suitable for many general purpose application.
Thermocouple Probe (Type K) TP-02A	* Measuring Range : -50 to 900 ℃ (-50 to 1650 ℉) * Dimension: 10 cm tube, 3.2 mm Dia.
Thermocouple Probe (Type K) TP-03	* Measuring Range : -50 to 1200 ℃ (-50 to 2200 ℉) * Dimension: 10 cm tube, 8 mm Dia.
Thermocouple Probe (Type K) TP-04 * surface Temp. probe.	* Measuring Range : -50 to 400 ℃ (-50 to 752 ℉) * Size : Temp. sensing head - 15 mm Dia. Probe length - 12 mm.

RS232 cable, UPCB-02	Isolated RS232 cable. Used to connect the meter to the computer (COM port)
USB cable, USB-01	USB cable. Used to connect the meter to the computer (USB port).
Data Acquisition software SW-U801-WIN	* The SW-U801-WIN is a multi displays (1/2/4/6/8 displays) powerful application software, provides the functions of data logging system, text display, angular display, chart display, data recorder high/low limit, data query, text report, chart report.. .xxx.mdb data file can be retrieved for EXCEL, ACESS.., wide intelligent applications.
Carrying case, CA-52A	* High quality carrying case with sash.

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

0806-LM8100