

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



4 IN 1 METER

Model : LM-8100

ISO-9001, CE, IEC1010



Lutron

LUTRON ELECTRONIC

The Art of Measurement

Anemometer, Humidity meter Light Meter, Thermometer

Model : LM-8100

FEATURES

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| * 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. |
| * °C/°F 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 size : 41.5 x 31.5 mm.
Measurement	Anemometer, Humidity, Temperature. Light
Operating Humidity	Max. 80% RH.
Temperature	0 to 50° C (32 to 122° F)
Over Input Display	Indication of " - - - - "
Data Output	RS 232/USB PC serial interface. <i>* Connect the optional RS232 cable UPCB-02 will get the RS232 plug.</i> <i>* Connect the optional USB cable USB-01 will get the USB plug.</i>
Power Supply	DC 1.5 V battery (UM4, AAA) x 6 PCs, DC 9V adapter input. @ AC/DC power adapter is optional.
Power Consumption	Anemometer : 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°C)

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 °F	0.1 °F
	(Semiconductor)	0 to 50 °C	0.1 °C

<i>Measurement</i>		<i>Range</i>	<i>Resolution</i>
Humidity	% RH	10 to 95 %RH	0.1 %RH
	Temperature	32 to 122 °F	0.1 °F
	(Semiconductor)	0 to 50 °C	0.1 °C

<i>Measurement</i>		<i>Range</i>	<i>Resolution</i>
Light	Lux	0 to 2,200 Lux	1 Lux
		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
Temperature (Type K)		-148 to 2372 °F	0.1 °F
		-100 to 1300 °C	0.1 °C

<i>Measurement</i>	<i>Range</i>	<i>Accuracy</i>
Air velocity	80 to 5910 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	$\pm 2.5\text{ }^{\circ}\text{F}$ $\pm 1.2\text{ }^{\circ}\text{C}$
	32 to 122 $^{\circ}\text{F}$	
Humidity	0 to 50 $^{\circ}\text{C}$	$< 70\% \text{ RH} :$ $\pm 4\% \text{ RH}$ $\geq 70\% \text{ RH} :$ $: \pm (4\% \text{rdg} + 1.2\% \text{RH})$
	26 to 95 %RH	
	32 to 122 $^{\circ}\text{F}$	
	0 to 50 $^{\circ}\text{C}$	
Light	0 to 20,000 Lux	$\pm 5\% \text{ rdg} \pm 8 \text{ dgt}$
	0 to 1,860 Fc	
Temperature (Type K)	-148 to 2372 $^{\circ}\text{F}$	$\pm (1\% \text{ rdg} + 2^{\circ}\text{F})$
	-100 to 1300 $^{\circ}\text{C}$	$\pm (1\% \text{ rdg} + 1^{\circ}\text{C})$

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

OPTIONAL TEMPERATURE PROBE AND OTHER ACCESSORIES

Thermocouple Probe (Type K) TP-01	<ul style="list-style-type: none"> * Measuring Range : -40 to 250 °C (-40 to 482 °F) * 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	<ul style="list-style-type: none"> * Measuring Range : -50 to 900 °C (-50 to 1650 °F) * Dimension: 10 cm tube, 3.2 mm Dia.
Thermocouple Probe (Type K) TP-03	<ul style="list-style-type: none"> * Measuring Range : -50 to 1200 °C (-50 to 2200 °F) * Dimension: 10 cm tube, 8 mm Dia.
Thermocouple Probe (Type K) TP-04 <i>* surface Temp. probe.</i>	<ul style="list-style-type: none"> * Measuring Range : -50 to 400 °C (-50 to 752 °F) * 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, ACCESS., wide intelligent applications.

Carrying case, CA-52A	* High quality carrying case with sash.
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