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

# 4 IN 1 METER

# Model : LM-8100

# *ISO-9001, CE, IEC1010*





# 4 in 1 Anemometer, Humidity meter Light Meter, Thermometer

## Model : LM-8100

F	EATURES
*	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.
*	wate charmer display for relative framaty and
	temperature measured values or air velocity and
L	temperature measured values at the same time.
*	Zero button design makes light meter calibration.

ilght fi \* Hold function to freeze the current reading value.

\* Computer data output interface (RS232/USB).

## **GENERAL SPECIFICATIONS**

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Display	play LCD display, LCD soze : 41.5 x 31.5 mm.			
Measurement	Anemometer, Humidity, Temperature. Light			
Operating	Max. 80% RH.			
Humidity	0 to 50° C (32 to 122° F)			
Temperature				
Over Input	Indication of " "			
Display				
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	Anemoter : Approx. DC 11 mA.			
Consumption	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	Instruction Manual 1 PC			
Accessory				
Optional	Type K Temperature probe, Carrying case			
Accessories	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 ℃	0.1 ℃

Measurement		Range	Resolution
Humidity	% RH	10 to 95 %RH	0.1 %RH
	Temperature	32 to 122 °F	0.1 °F
	(Semiconductor)	0 to 50 °C	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 °F	0.1 °F
		-100 to 1300 °C	0.1 °C

Measurement	Range	Accuracy
Air velocity	80 to 5910 ft/min	
	0.4 to 30.0 m/s	$\leq$ 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 °F	± 2.5 °F
	0 to 50 °C	± 1.2 °C
Humidity	10 to 95 %RH	< 70% RH :
		± 4 %RH
		<i>≧ 70% RH :</i>
		: ± ( 4%rdg + 1.2 %RH )
	32 to 122 °F	± 2.5 °F
	0 to 50 °C	± 1.2 °C
Light	0 to 20,000 Lux	± 5% rdg ± 8 dgt
	0 to 1,860 Fc	
Temperature	-148 to 2372 °F	± (1% rdg + 2°F)
(Type K)	-100 to 1300 °C	± (1% rdg + 1℃)

### Remark ·

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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

ACCESSORIES	
Thermocouple Probe	* Measuring Range : -40 to 250 $^\circ\!\mathrm{C}$
(Type K) TP-01	( -40 to 482 $^\circ\mathrm{F}$ )
	* Max. short-term operating temperature:
	* It's an ultra fast response naked-bead
	thermocouple suitable for many general
	purpose application.
Thermocouple Probe	* Measuring Range : -50 to 900 °C
(Type K) TP-02A	( -50 to 1650 °F )
	* Dimension: 10 cm tube, 3.2 mm Dia.
Thermocouple Probe	* Measuring Range : -50 to 1200 °C
(Type K) TP-03	( -50 to 2200 °F )
	* Dimension: 10 cm tube, 8 mm Dia.
Thermocouple Probe	* Measuring Range : -50 to 400 °C
(Type K) TP-04	( -50 to 752 °F )
* surface Temp.	* Size :
probe.	Temp. sensing head - 15 mm Dia.
	Probe length - 12 mm.
RS232 cable,	Isolated RS232 cable. Used to connect the
UPCB-02	meter to the computer ( COM port )
USB cable,	USB cable. Used to connect the meter to
USB-01	the computer ( USB port ).
Data Acquisition	* The SW-U801-WIN is a multi
software	displays ( 1/2/4/6/8 displays )
SW-U801-WIN	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.

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

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