hybrid power, Patent

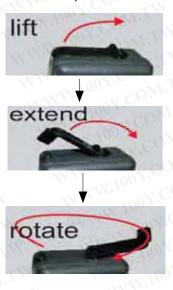
GREEN POWER 4 in 1 METER

Model: LM-8020G

ISO-9001, CE, IEC1010



No battery Generator power







The Art of Measurement

GREEN POWER 4 in 1 METER

胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787

特力材料886-3-5753170

Http://www.100y.com.tw

Model: LM-8020G

FEATURES

	*	Hybrid power, power supply from green power (handy
		generator) or battery. If power source come from " Green
		power ", battery is no need. Wind-up the generator 20
ĺ		seconds will offer several minutes energy typically.

- * 4 in 1 professional measuring instrument: Anemometer, Hygrometer, Thermometer, and Light meter.
- * Anemometer use low-friction ball bearing mounted wheel design provides high accuracy at high and low air velocity.
- * Anemometer use the separate probe, convenient for measurement.
- * Light meter use 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.
- 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.
- * Microprocessor circuit assures high accuracy and reliable performance.
- * Large LCD, dual function display.
- * Auto power shut off to battery life or manual power off.
- * Using the durable, long-lasting components and a strong lightweight ABS-plastic housing case.

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	40 mm x 32 mm LCD (Liquid crystal display).	
Measurement	Anemometer, Humidity, Temperature. Light	
Data Hold	Freeze the display reading.	
Memory	Maximum and Minimum reading values can	
Recall	be saved and retrieved by record function.	
Power off	Auto shut off saves battery life or manual off by push button.	
Overload	"" symbol on the display.	
indication	M 100x.	
Operating	0 °C to 50 °C (32 °F to 122 °F).	
Temperature	TW. In CON	
Operating	Max. 80% RH.	
Humidity	TANN. TO CO	
Sampling Time	Approx. 1 second.	
Power Supply	Green power :	
* Hybrid power	Power from the handy generator, battery is	
	no need.	
	Battery power :	
	DC 9V battery, 006P, MN1604 (PP3) or	
	equivalent.	
	* Alkaline or heavy duty type.	

Battery power : Approx. DC 10 mA.
M.Jan. COM.
432 g/0.95 LB (w/o battery).
Meter:
170 x 70 x 39 mm (6.7 x 2.8 x 1.1.5 inch).
Anemometer probe head :
Round, 72 mm Dia.
Instruction manual1 PC
Hard carrying case 1 PC
Type temperature probe :
TP-01 : Naked-bead, -40 to 250 $^\circ\!\! C$
TP-02A : Penetration, -50 to 900 ℃
TP-03 : Penetration, -50 to 1200 ℃
TP-04 : Surface, -50 to 400 ℃

ELECTRICAL SPECIFICATIONS (23 ± 5 °C)

Measurement	XI -XIX	Range	Resolution
ir velocity	m/s	0.4 - 25.0 m/s	0.1 m/s
A.COM	km/h	1.4 - 90.0 km/h	0.1 km/h
	MPH	0.9 - 55.9 mile/h	0.1 MPH
	knots	0.8 - 48.6 knots	0.1 knots
	ft/min	80 - 4930 ft/min	1 ft/min
	Temperature	32 to 122 °F	0.1 °F
	(Semiconductor)	0 to 50 ℃	0.1 °C

Measurement	TIME	Range	Resolution
Humidity	% RH	10 to 95 %RH	0.1 %RH
	Temperature	32 to 122 °F	0.1 °F
W. CON.C	(Semiconducto	or0 to 50 ℃	0.1 °C
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
100	TOM:	170 to 1,860 Fc	1 Ft-cd
Temperature (Type K)		-148 to 2372 °F	0.1 °F
		-100 to 1300 ℃	0.1 °C

Measurement	Range	Accuracy
Air velocity	0.4 - 25.0 m/s	
	1.4 - 90.0 km/h	\leq 20 m/s : ± 3% F.S.
TXVV	0.9 - 55.9 mile/h	> 20 m/s : ± 4% F.S.
MA	0.8 - 48.6 knots	11/1
WW	80 - 4930 ft/min	WW WWW.
	32 to 122 °F	± 2.5 °F
WW	0 to 50 ℃	± 1.2 ℃
Humidity	10 to 95 %RH	< 70% RH :
1//	1007.	± 4 %RH
N XX	MAN. C.	≥70% RH :
	W.100	: ± (4%rdg + 1.2 %RH)
W	32 to 122 °F	± 2.5 °F
<u>~</u> ≪1	0 to 50 ℃	± 1.2 ℃
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 ℃	± (1% rdg + 1°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

[·]