

*High sensitivity, 50 MHz to 3.5 GHz*

# RF FIELD STRENGTH POWER METER

Model : EMF-830

*ISO-9001, CE, IEC1010*



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

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## FEATURES

* High radio frequency electromagnetic wave field strength measurement.
* Radio field strength power measurement : GSM, CDMA, TDMA, WiFi, WIMAX Bluetooth, security system, cordless phones, Zigbee....
* Microwave oven leakage detection.
* Frequency range : Wide band, 50 MHz to 3.5 GHz.
* Measuring unit : V/m, mA/m, mV/m, mW/m <sup>2</sup> , uA/m, uW/cm <sup>2</sup> , uW/m <sup>2</sup>
* 3 axis RF sensor.
* Backlight graphics dot matrix LCD with 4 function screens, digital and bar-graph display with warning symbol.
* Beeper will sound for warning if measuring data are over the alert value.
* SD card capacity : 1 GB to 16 GB.
* Can default auto power off or manual power off.
* Data hold, record max. and min. reading.
* Microcomputer circuit, high accuracy.
* Power by UM3/AA ( 1.5 V ) x 6 batteries or DC 9V adapter.
* RS232/USB PC COMPUTER interface.

## GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 52 mm x 38 mm LCD with backlight ( on/off ).	
Measurement Unit	V/m mA/m mV/m mW/m <sup>2</sup> uA/m uW/cm <sup>2</sup> uW/m <sup>2</sup>	
Frequency range	50 MHz to 3.5 GHz.	
Sensor axis no.	3 axis RF sensor.	
Unit/Range	<i>Unit</i>	<i>Range</i>
	mV/m, V/m	20 mV/m to 25.0 V/m
	uA/m, mA/m	53.0 u A/m to 66.31 mA/m
	uW/m <sup>2</sup> , mW/m <sup>2</sup> uW/cm <sup>2</sup>	1.0 uW/m <sup>2</sup> to 1657.8 mW/m <sup>2</sup> 0.001 uW/cm <sup>2</sup> to 165.78 uW/cm <sup>2</sup>
Unit/Resolution	<i>Unit</i>	<i>Resolution</i>
	mV/m, V/m	0.1 mV/m to 0.1 V/m
	uA/m, mA/m	0.1 uA/m to 0.01 mA/m
	uW/m <sup>2</sup> , mW/m <sup>2</sup> uW/cm <sup>2</sup>	0.1 uW/m <sup>2</sup> to 0.1 mW/m <sup>2</sup> 0.001 uW/cm <sup>2</sup> to 0.01 uW/cm <sup>2</sup>
Absolute error <i>@ 1 V/m, 100 MHz</i>	± 1.0 dB	

Frequency response <i>@Taking into account typ. Cal. factor</i>	± 1.0 dB ( 50 MHz to 1.9 GHz ) ± 2.4 dB ( 1.91 GHz to 3.5 GHz )
Temperature response <i>@ 0 to 50 °C</i>	± 0.5 dB
Advanced setting	* Auto power OFF management * Set beep Sound ON/OFF * Warning value setting. * Unit setting.
Data Hold	Freeze the display reading.
Memory Recall	Maximum & Minimum value.
Sampling Time of Display	Approx. 1 second.
Data Output	RS 232/USB PC computer 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.
Operating Temperature	0 to 50 °C .
Operating Humidity	Less than 85% R.H.
Power Supply	* Alkaline or heavy duty DC 1.5 V battery ( UM3, AA ) x 6 PCs, or equivalent. * DC 9V adapter input. ( AC/DC power adapter is optional ).
Power Current	Normal operation ( w/o SD card save data and LCD Backlight is OFF ) : <i>Approx. DC 17 mA.</i> * .If LCD backlight on, the power consumption will increase approx. 4 mA
Weight	385 g/0.85 LB.
Dimension	235 x 68 x 45 mm. (9.25 x 2.7 x 1.9 inch).
Accessories Included	Instruction manual..... 1 PC
Optional Accessories	AC to DC 9V adapter. USB power to DC 9V converter, USBP-59 USB cable, USB-01. RS232 cable, UPCB-02. Data acquisition software, SW-U801-WIN. Excel data acquisition software, SW-E802. Hard carrying case, CA-06. Soft carrying case, CA-05A.

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

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