

***SD Card real time data recorder
Precision and General measurement, 2 in 1***

MAGNETIC METER

Model : BMG-3004SD

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

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Model : BMG-3004SD

FEATURES

- * Real time recorder, save the data into the SD memory card and can be downloaded to the Excel, extra software is no need.
- * Precision and General magnetic field measurement, 2 in 1 and wide range
- * For industrial, mechanical, material, electrical, laboratory field usage
- * Two probes are included : Precision probe and General probe.
- * Precision measurement (cooperate with the precision probe) :
 1. Use MI sensor, High sensitivity.
 2. Measurement ranges : -3,000 mG to 3,000 mG, -300 uT to 300 uT.
 3. Unit : mG (milli Gauss), uT (micro Tesla).
 4. Resolution : 0.1 mG/1 mG, 0.01 uT/0.1 uT.
- * General measurement (cooperate with the general probe) :
 1. Use Hall sensor with automatic Temp. compensation.
 2. Measurement ranges :
 - DC : 300.00 mT/3000.0 mT, 3,000.0 G/30,000 G
 - AC : 150.00 mT/1500.0 mT, 1,500.0 G/15,000 G
 3. Unit : mG (milli Gauss), uT (micro Tesla).
 4. Resolution : 0.1 G/1 G, 0.01 mT/0.1 mT.
- * DC and AC magnetic field measurement.
- * N pole/S pole indicator.
- * Zero button for DC magnetic function.
- * Data hold, record max. and min. reading.
- * Separate probe, easy operation and convenient for remote measurement.
- * RS232/USB computer interface.
- * Auto shut off is available to save battery life.
- * SD card capacity : 1 GB to 16 GB.
- * TFT color LCD, easy reading.
- * Optional acquisition software, SW-US801-WIN, SW-E802.
- * Power by UM3/AA (1.5 V) x 6 batteries or DC 9V adapter.

Dimension	Main instrument : 280 x 210 x 90 mm (11 x 8.26 x 3.54 inch)	Probe A: 195 x 25 x 19 mm (7.7 x 1.0 x 0.7 inch).	
		Probe B: 177 x 29 x 17 mm (6.9 x 1.14 x 0.66 inch).	
Accessories Included	Instruction manual..... 1 PC Magnetic Probe..... 1 PC Precision milli Magnetic Probe..... 1 PC		
Optional Accessories	RS232 cable, UPGB-02 USB cable, USB-01 Data Acquisition software, SW-U801-WIN		

Electroic Specifications

A. Precision milli magnetic field measurement

Measurement Unit	mG : milligauss uT : micro Tesla
Measurement Range	-3000mG to 3000 mG -300 uT to 300 uT
Resolution	0.1 mG -199.9 to 199.9 mG 1 mG ≥ 200 mG , ≤ -200 mG 0.01uT -19.99 uT to 19.99 uT 0.1uT ≥ 20.0 uT , ≤ - . uT
Accuracy at 23 ± 5 °C	± (2%+ 2 mG) * -1,000 mG to 1,000 mG * -100.0 uT to 100.0 uT
Sensor Type	MI素子 sensor.

General Specifications

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	TFT LCD size : mm x mm	
Datalogger Sampling Time Setting range	Auto	1 sec to 3600 sec. @ Sampling time can set to 1 second, but memory data may loss.
	Manual	Push the data logger button once will save data one time. @ Set the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position (Location) no.
Data error no.	≤ 0.1 % no. Of total saved data typically.	
Temp. Compensation for hall sensor	Probe head build the Temp. sensor for using the ATC (automatic Temp. compensation).	
Field Direction	Uniaxial.	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Display Sampling Time	Approx. 1 second.	
Power off	Manual off by push button or Auto shut off to save battery life.	
Operating Temperature	0 to 50 °C.	
Operating Humidity	Less than 85% R.H.	
Data Output	RS 232/USB PC serial interface. * Connect the optional RS232 cable UPGB-02 will get the RS232 plug. * Connect the optional USB cable USB-01 will get the USB plug.	
Power Supply	(Alkaline or Heavy duty type 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) : Approx. DC 13 mA. When SD card save the data but and LCD Backlight is OFF) : Approx. DC 35 mA. * If LCD backlight on, the power consumption will increase approx.3 mA.	
Weight	Approx. 303 g/0.67 LB. (Meter & probe)	

B. General magnetic field measurement

Measurement	Range	Resolution	Accuracy at 23 ± 5 °C
	G	Range 1 3,000.0 G 0.1 G Range 2 30,000 G 1 G	
AC 50/60 Hz	mT	Range 1 150.00 mT 0.01 mT Range 2 1,500.0 mT 0.1 mT	± (5 %+ 10 digit) reading
	G	Range 1 1,500.0 G 0.1 G Range 2 15,000 G 1 G	
Sensor Type	Hall sensor. G : milligauss mT : micro Tesla		

* Spec. tested under the environment RF Field Strength less than 3 V/M & frequency less than the 30 MHz only.