SD card real time recorder

AC/DC MAGNETIC METER

Model: MG-3003SD

ISO-9001, CE, IEC1010

www.yalab.com.tw

02-2389-0101









The Art of Measurement

SD card real time recorder

AC/DC MAGNETIC METER

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FEATURE

- * Wide range, general purpose magnetic measurement. for industrial, mechanical, material, electrical, laboratory field usage.
- * Unit : G (Gauss), mT (milli Tesla).
- * DC or AC magnetic measurement.
- * DC magnetic range: 300.00 mT, 3000.0 mT.
- * AC magnetic range: 150.00 mT, 1500.0 mT.
- * Resolution: 0.01 mT/0.1 mT, 0.1 G/1 G.
- * DC polarity : N/S (north/south pole).
- * Use Hall sensor with automatic Temp. compensation.
- * Zero button for DC magnetic function.
- * Separate probe, easy operation and convenient for remote measurement.
- * Real time SD memory card Datalogger, built-in Clock and Calendar, sampling time can set from 1 sec to 3600 seconds.
- * Manual datalogger is available, during execute the manual datalogger function, it can set the different location no. (position 1 to position 99).
- * Innovation and easy operation, computer is not need to setup extra software, after execute datalogger, just take away the SD card from the meter and plug in the SD card into the computer, it can down load the all the measured value with the time information (year/month/date/ hour/minute/second) to the Excel directly, then user can make the further data or graphic analysis by themselves.
- * SD card capacity: 1 GB to 16 GB.
- * LCD with green light backlight, easy reading.
- * It 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.

SPECIFICATION

Circuit	Custom one-chip of microprocessor LSI circuit.					
Display	LCD s	LCD size : 52 mm x 38 mm. Dot matrix LCD with backlight.				
Measurement Unit	mT	milli Tesla				
	G	Gauss				
Measurement Range	mT		Range 1	300.00 mT x 0.01 mT		
(DC function)			Range 2	3,000.0 mT x 0.1 mT		
	G		Range 1	3,000.0 G x 0.1 G		
			Range 2	30,000 G x 1 G		
Measurement Range, AC	mT		Range 1	150.00 mT x 0.01 mT		
(AC function)			Range 2	1,500.0 mT x 0.1 mT		
	G		Range 1	1,500.0 G x 0.1 G		
			Range 2	15,000 G x 1 G		
Accuracy ($23\pm5~\%$)	DC		± (5 %rdg.+1	± (5 %rdg.+10 digit)		
	AC		± (5 % rdg. + 20 digit)			
Sensor	Hall sensor.					

Temp. Compensation for hall sensor Field Direction Datalogger Sampling Time Setting range Manual 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. Memory Card SD memory card. 1 GB to 16 GB. * SD memory card Format	Frequency Response	AC measurement : 50 Hz / 60 Hz				
Field Direction Datalogger Sampling Time Setting range Auto 1 second to 3600 seconds. @ 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. Memory Card SD memory card. 1 GB to 16 GB.	Temp. Compensation for	Probe head build the Temp. sensor for using the ATC (automatic Temp.				
Datalogger Sampling Time Setting range Auto 1 second to 3600 seconds. @ 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. Memory Card SD memory card. 1 GB to 16 GB.	hall sensor	compensation).				
Setting range @ 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. Memory Card SD memory card. 1 GB to 16 GB.	Field Direction	Uniaxial.				
Solution Ioss. 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. Memory Card SD memory card. 1 GB to 16 GB.	Datalogger Sampling Time	Auto	1 second to 3600 seconds.			
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. Memory Card SD memory card. 1 GB to 16 GB.	Setting range		@ Sampling time can set to 1 second, but memory data may			
the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position (Location) no. Memory Card SD memory card. 1 GB to 16 GB.			loss.			
@ Manual mode, can also select the 1 to 99 position (Location) no. Memory Card SD memory card. 1 GB to 16 GB.		Manual	Push the data logger button once will save data one time. @ Set			
no.Memory CardSD memory card. 1 GB to 16 GB.			the sampling time to 0 second.			
Memory Card SD memory card. 1 GB to 16 GB.			@ Manual mode, can also select the 1 to 99 position (Location)			
			no.			
Advanced setting * SD memory card Format	Memory Card	SD memory card. 1 GB to 16 GB.				
ria various secting	Advanced setting	* SD memory card Format				
* Set clock time (Year/Month/Date, Hour/Minute/ Second)		· · · · · · · · · · · · · · · · · · ·				
* Set sampling time		, -				
* Auto power OFF management		* Auto power OFF management				
* Set beep Sound ON/OFF		* Set beep Sound ON/OFF				
* Decimal point of SD card setting		·				
* Unit setting						
Data Hold Freeze the display reading.	Data Hold	Freeze the display reading.				
Memory Recall Maximum & Minimum value.	Memory Recall	Maximum & Minimum value.				
Sampling Time of Display Approx. 1 second.	Sampling Time of Display	• • •				
Data Output RS 232/USB PC computer interface.	Data Output	•				
* 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 $^{\circ}$ C.	Operating Temperature	0 to 50 ℃.				
Operating Humidity Less than 85% R.H.	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.	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).		* DC 9V ad	lapter input. (AC/DC power adapter is optional).			
Power Current Normal operation (w/o SD card save data and LCD Backlight is OFF) :	Power Current	Normal operation (w/o SD card save data and LCD Backlight is OFF) :				
Approx. DC 13 mA.		Approx. DC 13 mA.				
When SD card save the data and LCD Backlight is OFF): Approx. DC 35 mA.		When SD card save the data and LCD Backlight is OFF): Approx. DC 35 mA.				
* If LCD backlight on, the power consumption will increase approx. 3 mA.		* If LCD ba	cklight on, the power consumption will increase approx. 3 mA.			
Weight Approx. 303 g/0.67 LB. * Meter and probe	Weight	Approx. 30	3 g/0.67 LB. * Meter and probe			
Dimension Meter 181 x 68 x 45 mm (7.1 x 2.7 x 1.8 inch)	Dimension	Meter	181 x 68 x 45 mm (7.1 x 2.7 x 1.8 inch)			
Probe 195 x 25 x 19 mm (7.7 x 1.0 x 0.7 inch).		Probe	195 x 25 x 19 mm (7.7 x 1.0 x 0.7 inch).			
Accessories Included * Instruction manual. 1 PC	Accessories Included	* Instruction manual. 1 PC				
* Magnetic Probe 1 PC		* Magnetic Probe 1 PC				
* Hard carrying case (CA-06). 1 PC		* Hard carrying case (CA-06). 1 PC				
Optional Accessories SD memory card (4 GB) AC to DC 9V adapter.	Optional Accessories	SD memory card (4 GB) AC to DC 9V adapter.				
USB cable, USB-01. RS232 cable, UPCB-02.						
Data Acquisition software, SW-U801-WIN. Excel data Acquisition software,		Data Acqui	isition software, SW-U801-WIN. Excel data Acquisition software,			
SW-E802.		SW-E802.				

^{*} Appearance and specifications listed in this brochure are subject to change without notice.

PATENT

CHINA: ZL 2008 2 0189918.5 ZL 2008 2 0189917.0 Germany: Nr. 20 2008 016 337.4 JAPAN: 3151214

MG-3003SD+1904