SD Card real time data logger, Patent

HUMIDITY/BAROMETER/TEMP. DATA RECORDER

Model : MHB-382SD   *ISO-9001, CE, IEC1010*

LUTRON ELECTRONIC

The Art of Measurement

SD Card real time data logger
HUMIDITY/BARO/TEMP. DATA RECORDER
Model : MHB-382SD

FEATURES

* Monitor with real time data logger, save the measuring data along the time information (year, month, date, hour, minute, second) into the SD memory card and can be down load to the Excel, extra software is no need. user can make the further data or graphic analysis by themselves.	
* Show Humidity, Temperature and Barometer value in the same LCD.	
* 0.1 %RH resolution for the humidity reading, 0.1 degree resolution for the Temp. reading.	
* Used the precision capacitance type humidity sensor, professional and high accuracy for humidity measurement.	
* Professional barometer, unit : hPa, mmHg, inHg.	
* SD card capacity : 1 GB to 16 GB.	
* Large LCD display, easy readout.	
* Microcomputer circuit, high reliability.	
* Low power consumption and long battery life when use battery power.	
* DC 1.5V (UM-4, AAA) battery x 6 PCs or DC 9V adapter in.	
* RS232/USB computer interface.	
* Patented	

Operating Temperature	0 to 50 ℃.
Operating Humidity	Less than 90 % R.H.
Power Supply	*.Alkaline or heavy duty DC 1.5 V battery (UM4, AAA) x 6 PCs, or equivalent. *.DC 9V adapter input. (AC/DC power adapter is optional).
Battery life	If use the new battery (alkaline type) and sampling time set to 60 seconds, the battery life will be > one month typically.
Weight	285 g/0.63 LB.
Dimension	132 x 80 x 32 mm (5.2 x 3.1 x 1.3 inch)
Accessories Included	Instruction manual..........................1 PC Hanging unit (with sticker)............. 1 PC
Optional Accessories	SD Card. AC to DC 9V adapter. USB cable, USB-01. RS232 cable, UPCB-02. Data Acquisition software, SW-U801-WIN.

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 60 mm x 50 mm
Measurement	Humidity, Temperature and Barometer
Memory Card	SD memory card, 1 GB to 16 GB.
Datalogger Sampling Time	5/10/30/60/120/300/600 seconds or Auto. * *Default sampling time is 60 seconds.* * *The " Auto " sampling . means when the measuring value is changed (> ± 1 %RH or > ± 1 ℃ or > ± 1 hPa) will save the data one time only.*
Data error no.	≦ 0.1 % no. of total saved data typically.
Advanced setting	* SD memory card Format * Set clock time (Year/Month/Date, Hour/Minute/ Second) * Set sampling time value * Set beep sound ON/OFF. * Decimal point of SD card setting * Set temperature unit to ℃ or ℉ * Set RS232 out ON/OFF. * Set the unit of Barometer
Update Time of Display	Approx. 1 second if measuring data is changed.
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.*

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

Humidity

Range	10 % to 90 % R.H.
Resolution	0.1 % R.H.
Accuracy	≧70% RH : ± (4% reading + 1 % RH).
	< 70% RH : ± 4% RH.

Temperature

Range	0 ℃ to 50 ℃ ,32 ℉ to 122 ℉.
Resolution	0.1 degree
Accuracy	℃ - ± 0.8 ℃. ℉ - ± 1.5 ℉.

Barometer

Measurement	Range	Resolution	Accurac @ reading
hPa	10.0 to 1000.0	0.1	± 2 hPa
	1000.1 to 1100.0	0.1	± 3 hPa
mmHg	7.5 to 825.0	0.1	± 1.5 mmHg
inHg	0.29 to 32.48	0.01	± 0.1 inHg

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