

*SD Card real time data logger, Patent*

# **HUMIDITY/BAROMETER/TEMP. MONITOR**

**Model : MHB-382SD**

*ISO-9001, CE, IEC1010*



**LUTRON ELECTRONIC**

*The Art of Measurement*

# SD Card real time data logger

# HUMIDITY/BAROMETER/TEMP. MONITOR

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 °C .
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 ( 2 GB ) AC to DC 9V adapter. USB cable, USB-01. RS232 cable, UPGB-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. * <i>Default sampling time is 60 seconds.</i> * <i>The " Auto " sampling . means when the measuring value is changed ( &gt; ± 1 %RH or &gt; ± 1 °C or &gt; ± 1 hPa ) will save the data one time only.</i>
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 °C or °F * 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. * <i>Connect the optional RS232 cable UPGB-02 will get the RS232 plug.</i> * <i>Connect the optional USB cable USB-01 will get the USB plug.</i>

## ELECTRICAL SPECIFICATIONS (23± 5 °C)

### 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 °C to 50 °C, 32 °F to 122 °F.
Resolution	0.1 degree
Accuracy	°C - ± 0.8 °C .
	°F - ± 1.5 °F .

### Barometer

Measurement	Range	Resolution	Accuracy @ reading
hPa	10.0 to 999.9	0.1	± 2 hPa
	1000 to 1100	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	TAIWAN : M 358970 M 359043
	Germany : Nr. 20 2008 016 337.4	JAPAN : 3151214 U.S.A. : Pending

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