## SD Card real time data logger, Patent

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

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









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	0 to 50 ℃.		
Temperature			
Operating	Less than 90 % R.H.		
Humidity			
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	Instruction manual1 PC		
Included	Hanging unit ( with sticker )1 PC		
Optional	SD Card ( 2 GB )		
Accessories	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	circuit.		
Display			
Display	LCD size: 60 mm x 50 mm		
Measurement	Humidity, Temperature and Barometer		
Memory Card	SD memory card, 1 GB to 16 GB.		
Datalogger	5/10/30/60/120/300/600 seconds		
Sampling Time	or Auto.		
	* Default sampling time is 60 seconds.		
	* The " Auto " sampling . means when		
	the measuring value is changed ( >		
	$\pm$ 1 %RH or > $\pm$ 1 $^{\circ}$ C or > $\pm$ 1		
	hPa ) will save the data one time only.		
Data error no.	$\leq$ 0.1 % no. of total saved data typically.		
Advanced	* SD memory card Format		
setting	* 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 $^\circ\! C$ or $^\circ\! F$		
	* Set RS232 out ON/OFF.		
	* Set the unit of Barometer		
Update Time	Approx. 1 second if measuring data		
of Display	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 $\pm$ 5 $^{\circ}$ 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 ℃ to 50 ℃,32 °F to 122 °F.		
Resolution	0.1 degree		
Accuracy	$^{\circ}\text{C}$ - $\pm$ 0.8 $^{\circ}\text{C}$ .		
	°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

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