

*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.<br>* 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<br>( 5.2 x 3.1 x 1.3 inch )  |
| Accessories Included  | Instruction manual.....1 PC<br>Hanging unit ( with sticker )..... 1 PC  |
| Optional Accessories  | SD Card ( 2 GB )<br>AC to DC 9V adapter.<br>USB cable, USB-01.<br>RS232 cable, UPGB-02.<br>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.<br>* <i>Default sampling time is 60 seconds.</i><br>* <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<br>* Set clock time ( Year/Month/Date, Hour/Minute/ Second )<br>* Set sampling time value<br>* Set beep sound ON/OFF.<br>* Decimal point of SD card setting<br>* Set temperature unit to °C or °F<br>* Set RS232 out ON/OFF.<br>* 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.<br>* <i>Connect the optional RS232 cable UPGB-02 will get the RS232 plug.</i><br>* <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 :<br>± ( 4% reading + 1 % RH).<br><br>< 70% RH :<br>± 4% RH. |

#### Temperature

|            |                                  |
|------------|----------------------------------|
| Range      | 0 °C to 50 °C, 32 °F to 122 °F.  |
| Resolution | 0.1 degree                       |
| Accuracy   | °C - ± 0.8 °C.<br>°F - ± 1.5 °F. |

#### Barometer

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

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