SD Card real time data recorder, Patent CO2, CO, O2, Humidity, Temp., 6 in 1



## AIR QUALITY METER

Model: AQ-9901SD *ISO-9001, CE, IEC1010* 







The Art of Measurement

### **AIR QUALITY METER**

Model: AQ-9901SD



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FEATURES

**Test and Measurement Instruments C.C.** 

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| * | Real time recorder, save the data 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. under the Excel software.                 |
| * | At the same time, the SD memory card can record 3                 |
|   | probe's data ( %RH/CO2/O2/Temp. or                                |
|   | %RH/CO2/CO/Temp. ) along with the time information                |
|   | into the one Excel file at the same time.                         |
| * | Manual datalogger is available, during execute the                |
|   | manual datalogger function, it can set the different              |
|   | location no. ( position 1 to position 99 ).                       |
| * | Air quality measurement application, multi-function :             |
|   | CO2 (Carbon dioxide ), CO ( Carbon monoxide ), O2                 |
|   | ( Oxygen in air ), Humidity, temperature measurement.             |
|   | CO2 range : 0 to 4,000 ppm x 1 ppm.                               |
|   | O2 range: 0 to 30.0 % x 0.1 %.                                    |
|   | CO range : 0 to 1,000 ppm x 1 ppm.                                |
|   | Humidity range: 10 to 95 %RH.                                     |
|   | Dew point Temp. and Wet bulb Temp. measurement.                   |
|   | Temp. range : 0 to 50.0 $^{\circ}$ C, $^{\circ}$ C/ $^{\circ}$ F. |
|   | CO2 sensor : NDIR, long term reliability.                         |
| * | CO, CZ SCHOOL CONTAINS CONTO, POR                                 |
|   | Humidity sensor : Precision capacitance sensor                    |
|   | Alarm setting with the beeper sound output.                       |
|   | Sampling time for data recorder is 2 seconds to 8 hours.          |
| * | Complete set with 4 probes :                                      |
|   | CO2/Temp. probe, O2/Temp. probe, CO/Temp. probe,                  |
|   | Humidity/Temp. probe, main meter and the hard carrying            |
| _ | case.   |
|   | Separate probe, easy for remote measurement.                      |
| * | Meter can cooperate with 2 GB to 16 GB SD card, SD                |
| _ | card is optional.   |
| * | RS232/USB computer interface.                                     |
|   |   |

GENERAL SPECIFICATIONS

| Circuit                                    | Custom one-chip of microprocessor LSI circuit.  |  |  |  |
|--|---|--|--|--|
| Dil  |   |  |  |  |
| Display                                    | LCD size: 52 mm x 38 mm<br>LCD with green backlight ( ON/OFF ).   |  |  |  |
| Measurement                                | CO2 (Carbon dioxide )   |  |  |  |
|  | CO ( Carbon monoxide )  |  |  |  |
|  | O2 ( Oxygen in air )  |  |  |  |
|  | Humidity  |  |  |  |
|  | Dew point Temp., Wet bulb Temp.   |  |  |  |
| Sensor                                     | Tempera<br>CO2  | NDIR * Nondispersive infrared sensor   |  |  |
| structure                                  |   | Precision capacitance sensor   |  |  |
| St. detaile                                | 02  | Galvanic cell type   |  |  |
|  | CO  | Galvanic cell type   |  |  |
|  | Temp.   | Precision thermistor   |  |  |
| Datalogger                                 | Auto  | 2 sec to 8 hour 59 min. 59 sec.  |  |  |
| Sampling Time                              |   | @ Sampling time can set to 1 second,   |  |  |
| Setting range                              | Manual  | but memory data may loss.  Push the data logger button   |  |  |
|  | riariaar  | once will save data one time.  |  |  |
|  |   | @ Set the sampling time to   |  |  |
|  |   | 0 second.  |  |  |
|  |   | @ Manual mode, can also select the   |  |  |
| D-1  | 0.10/ -6  | 1 to 99 position ( Location ) no.  |  |  |
| Data error no.                             |   | total saved data max.  |  |  |
| Memory Card<br>Advanced                    |   | ory card. 1 GB to 16 GB.  nory card Format   |  |  |
| setting                                    | * Set cloc  | k time   |  |  |
| 0  | * Set sam   | pling time   |  |  |
| @ main setting                             |   | * Auto power OFF management<br>* Set beep Sound ON/OFF   |  |  |
|  | * Decimal point of SD card setting  |  |  |  |
|  | * Temp. unit setting  |  |  |  |
| Data Hald                                  |   | alue setting   |  |  |
| Data Hold<br>Memory Recall                 |   | ne display reading.  |  |  |
|  | Maximum & Minimum value.  Approx. 1 second.   |  |  |  |
|  |   |  |  |  |
| Sampling Time                              |   |  |  |  |
|  | Approx.   |  |  |  |
| Sampling Time<br>of Display                | Approx.   | 1 second.  JSB PC computer interface.  ct the optional RS232 cable   |  |  |
| Sampling Time<br>of Display                | RS 232/L * Connec   | 1 second.  JSB PC computer interface.  It the optional RS232 cable  12 will get the RS232 plug.  |  |  |
| Sampling Time<br>of Display                | RS 232/U * Connect UPCB-U * Connect   | I second.  JSB PC computer interface.  It the optional R5232 cable  12 will get the R5232 plug.  It the optional USB cable   |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/L * Connect UPCB-L * Connect USB-03  | I second.  JSB PC computer interface.  It the optional RS232 cable  12 will get the RS232 plug.  It the optional USB cable  It will get the USB plug.  |  |  |
| Sampling Time<br>of Display                | RS 232/L * Connect UPCB-C * Connect USB-O * Alkalin   | I second.  ISB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  will get the USB plug.  e or heavy duty DC 1.5 V battery   |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connec UPCB-U * Connec USB-0: * Alkalin ( UM3,   | I second.  JSB PC computer interface.  It the optional RS232 cable  12 will get the RS2332 plug.  It the optional USB cable  I will get the USB plug.  |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connec UPCB-0 * Connec USB-0 * Alkalin ( UM3, * DC 9V  | I second.  JSB PC computer interface.  Let the optional RS232 cable  22 will get the RS232 plug.  Let the optional USB cable  Let will get the USB plug.  e or heavy duty DC 1.5 V battery  AA ) x 6 PCs, or equivalent.  adapter input. (AC/DC power  Let is optional ).  |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connect UPCB-U * Connect USB-02 * Alkalin ( UM3, * DC 9V adapte  | I second.  ISB PC computer interface.  It the optional RS232 cable  Is will get the RS232 plug.  It the optional USB cable  Is will get the USB plug.  I will get the USB plug.  I or heavy duty DC 1.5 V battery  AA ) x 6 PCs, or equivalent.  adapter input. (AC/DC power er is optional).  Normal operation ( w/o SD card save   |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connect UPCB-U * Connect USB-02 * Alkalin ( UM3, * DC 9V adapte CO2 measure-   | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS233 plug.  It the optional USB cable  will get the USB plug.  e or heavy duty DC 1.5 V battery  AA ) x 6 PCs, or equivalent.  adapter input. ( AC/DC power  er is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):   |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connect UPCB-U * Connect USB-02 * Alkalin ( UM3, * DC 9V adapte  | I second.  JSB PC computer interface.  At the optional RS232 cable  22 will get the RS232 plug.  At the optional USB cable  It will get the USB plug.  Be or heavy duty DC 1.5 V battery  AA ) x 6 PCs, or equivalent.  adapter input. (AC/DC power  Ber is optional).  Normal operation ( w/o SD card sawe  data and LCD Backlight is OFF):  Approx. DC 136.5 m4.   |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connect UPCB-U * Connect USB-02 * Alkalin ( UM3, * DC 9V adapte CO2 measure-   | I second.  JSB PC computer interface.  Let the optional RS232 cable  22 will get the RS232 plug.  Let the optional USB cable  Let will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  Let soptional).  Normal operation ( w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connect UPCB-U * Connect USB-02 * Alkalin ( UM3, * DC 9V adapte CO2 measure-   | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  r is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  |  |  |
| Sampling Time<br>of Display<br>Data Output | RS 232/U * Connect UPCB-U * Connect USB-02 * Alkalin ( UM3, * DC 9V adapte CO2 measure-   | I second.  JSB PC computer interface.  At the optional RS232 cable  22 will get the RS233 plug.  At the optional USB cable  Will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  er is optional).  Normal operation (w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 166 mA.   |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/U  * Connec  UPCB-0  * Alkalin  (UM3,  * DC 9V  adapte  CO2  measure-ment   | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  r is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/L * Connec UPCB-6 * Connec USB-0: * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  Humidity   | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  4 will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. ( AC/DC power  er is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 166 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 10.5 mA.   |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/U * Connec UPCB-C * Connec USB-O * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  Humidity measure-   | I second.  JSB PC computer interface.  At the optional RS232 cable  22 will get the RS232 plug.  At the optional USB cable  It will get the USB plug.  Be or heavy duty DC 1.5 V battery  AA ) x 6 PCs, or equivalent.  Adapter input. (AC/DC power  For is optional).  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 166 mA.  Normal operation ( w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 165 mA.  When SD card save the data and LCD  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/U * Connec UPCB-C * Connec USB-O * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  Humidity measure-   | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  er is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 166 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 165.5 mA.  Bottlight is OFF):  Approx. DC 165.5 mA.  Bottlight is OFF):  Approx. DC 165.5 mA.  Bottlight is OFF):   |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/L  * Connec  UPCB-L  * Connec  USB-DJ  * Alkalin  ( UM3,  * DC 9V  adapte  CO2  measure- ment  Humidity  measure- ment  | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS233 plug.  It the optional USB cable  4 will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. ( AC/DC power  er is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 40 mA.  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx RS 232/L * Connec UPCB-L * Connec USB-0 * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  Humidity measure- ment  O2 or   | I second.  JSB PC computer interface.  At the optional RS232 cable  22 will get the RS232 plug.  At the optional USB cable  It will get the USB plug.  Be or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. ( AC/DC power  Ber is optional ).  Normal operation ( w/o SD card save  At an at CLD Backlight is OFF):  Approx. DC 136.5 mA.  Normal operation ( w/o SD card save  Abacklight is OFF):  Approx. DC 166 mA.  Normal operation ( w/o SD card save  Aparox. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  Normal operation ( w/o SD card save)  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/L  * Connec  UPCB-L  * Connec  USB-DJ  * Alkalin  ( UM3,  * DC 9V  adapte  CO2  measure- ment  Humidity  measure- ment  | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the LISB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  er is optional).  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 166 mA.  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 105.5 mA.  Backlight is OFF):  Approx. DC 107.5 mA.  Mormal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 40 mA.  Normal operation (w/o SD card save  data and LCD Backlight is OFF):   |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/L  * Connec  UPCB-C  * Alkalin  ( UM3,  * DC 9V  adapte  CO2  measure- ment  Humidity  measure- ment  O2 or  CO   | I second.  JSB PC computer interface.  At the optional RS232 cable  22 will get the RS232 plug.  At the optional USB cable  It will get the USB plug.  Be or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. ( AC/DC power  Ber is optional ).  Normal operation ( w/o SD card save  At an at CLD Backlight is OFF):  Approx. DC 136.5 mA.  Normal operation ( w/o SD card save  Abacklight is OFF):  Approx. DC 166 mA.  Normal operation ( w/o SD card save  Aparox. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  Normal operation ( w/o SD card save)  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx RS 232/L * Connec UPCB-L * Connec USB-0: * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  O2 or CO2 measure- ment  | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the LSB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. (AC/DC power  er is optional).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 166 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 165. mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 10.5 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 40 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 40 mA.  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 12.5 mA.  When SD card save the data and LCD  Backlight is OFF):  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx RS 232/L * Connec UPCB-L * Connec USB-0: * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  O2 or CO measure- ment   | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  4 will get the USB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCs, or equivalent.  adapter input. ( AC/DC power  er is optional ).  Normal operation ( w/o SD card save data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 10.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.  |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/L  * Connec  UPCB-C  * Connec  USB-0.  * Alkalin  ( UM3,  * DC 9V  adapte  CO2  measure- ment  O2 or  CO  measure- ment  * If LCD                                   | I second.  JSB PC computer interface.  It the optional RS232 cable  12 will get the RS232 plug.  It the optional USB cable  It will get the USB plug.  AP DE CONTROLL OF CONTROLL  AND IN SECONTROLL  AND I |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx.  RS 232/L  * Connec  UPCB-C  * Connec  USB-0;  * Alkalin  ( UM3,  * DC 9V  adapte  CO2  measure- ment  O2 or  CO  measure- ment  O2 or  CO  measure- ment  * If LCD  CODSUI | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the LSB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCS, or equivalent.  adapter input. (AC/DC power  er is optional).  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 166 mA.  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 105.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 40.7 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 40.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 42.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.   |  |  |
| Sampling Time<br>of Display<br>Data Output | Approx RS 232/L * Connec UPCB-L * Connec USB-0: * Alkalin ( UM3, * DC 9V adapte CO2 measure- ment  O2 or CO2 measure- ment  * If LCD consult 12 mA                                  | I second.  JSB PC computer interface.  It the optional RS232 cable  22 will get the RS232 plug.  It the optional USB cable  I will get the LSB plug.  e or heavy duty DC 1.5 V battery  AA) x 6 PCS, or equivalent.  adapter input. (AC/DC power  er is optional).  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 136.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 166 mA.  Normal operation (w/o SD card save  data and LCD Backlight is OFF):  Approx. DC 105.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 40.7 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 40.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 42.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.  When SD card save the data and LCD  Backlight is OFF):  Approx. DC 12.5 mA.   |  |  |

| Operating<br>Humidity | Less than 80% R.H.    |   |  |  |
|-----------------------|-----------------------|---|--|--|
| Weight                | 350 g/0.77 LB.        |   |  |  |
| Dimension             | Meter                 | 177 x 68 x 45 mm                        |  |  |
|                       | Humidity<br>probe     | 197 mm in length.                       |  |  |
|                       | CO2 probe             | 190 x 38 x 28 mm                        |  |  |
|                       | O2 probe              | 150 x 38 x 38 mm                        |  |  |
|                       | CO probe              | 150 x 38 x 38 mm                        |  |  |
| Accessories           | Instruction           | manual1 PC                              |  |  |
| Included              | Hard carryi           | Hard carrying case, CA-081 PC           |  |  |
|                       | CO2 probe.            | CO2 probe 1 PC                          |  |  |
|                       | Humidity p            | Humidity probe 1 PC                     |  |  |
|                       | O2 probe              | O2 probe 1 PC                           |  |  |
|                       | CO probe              | CO probe                                |  |  |
| Optional              | SD memory             | / card ( 2 GB )                         |  |  |
| Accessories           | AC to DC 9            | AC to DC 9V adapter.                    |  |  |
|                       | USB cable, USB-01.    |   |  |  |
|                       | RS232 cable, UPCB-02. |   |  |  |
|                       | Data Acqui            | Data Acquisition software, SW-U801-WIN. |  |  |

#### ELECTRICAL SPECIFICATIONS (23 $\pm$ 5 °C)

#### CO2 ( Carbon dioxide )

|             | Range         | 0 to 4,000 ppm                |
|-------------|---------------|-------------------------------|
| CO2         | Resolution    | 1 ppm                         |
| ( Carbon    | Accuracy      | ± 40 ppm                      |
| dioxide )   |               | * ≤1,000 ppm.                 |
|             |               | ± 5% of reading               |
| 23 ± 5 ℃.   |               | * > 1,000 ppm ≤ 3,000 ppm.    |
|             |               | ± 250 ppm typically           |
|             |               | * > 3,000 ppm, reference only |
|             | Repeatability | ± 20 ppm * ≤ 3,000 ppm.       |
| Temperature | Range         | 0 ℃ to 50 ℃,32 ℉ to 122 ℉.    |
|             | Resolution    | 0.1 degree                    |
|             | Accuracy      | °C: ± 0.8 °C °F: ± 1.5 °F.    |

#### CO ( Carbon dioxide )

|             | Range                  | 0 to 1,000 ppm                      |
|-------------|------------------------|-------------------------------------|
| CO          | Resolution             | 1 ppm                               |
| * Carbon    | Accuracy               | ± (5% + 2 ppm)                      |
| monoxide    | Response               | < 30 seconds                        |
|             | time *                 |                                     |
|             | Sensitivity            | < 5% per year                       |
|             | drift                  |                                     |
|             | * The respons          | se time value is specified to reach |
|             | the 90% reading value. |                                     |
| Temperature | Range                  | 0 ℃ to 50 ℃,32 ℉ to 122 ℉.          |
|             | Resolution             | 0.1 degree                          |
|             | Accuracy               | °C:±0.8°C °F:±1.5°F.                |

#### O2 ( Air oxygen )

|              | Range          | 0 to 30 %O2.                  |
|--------------|----------------|-------------------------------|
| 02           | Resolution     | 0.1 %O2.                      |
| * Air oxygen | Accuracy       | ± ( 1 % reading + 0.2 % O2 ). |
|              |                | @ After calibration           |
|              | Response time  | ≤ 15 seconds. @ t 90          |
|              | Overload       | 100 %O2.                      |
|              | protection     |                               |
|              | Environment    | 0.9 to 1.1 atmosphere.        |
|              | pressure range |                               |
|              | Expected life  | ≥2 years.                     |
|              | time           |                               |
| Temperature  | Range          | 0 ℃ to 50 ℃,32 ℉ to 122 ℉.    |
|              | Resolution     | 0.1 degree                    |
|              | Accuracy       | °C:±0.8°C °F:±1.5°F.          |
|              |                |                               |

#### Humidity/Temperature

|             | Range      | 5 % to 95 % R.H.               |
|-------------|------------|--------------------------------|
| Humidity    | Resolution | 0.1 % R.H.                     |
|             | Accuracy   | ≥70% RH:                       |
|             | 1          | ± (3% reading + 1% RH).        |
|             |            | < 70% RH:                      |
|             |            | ± 3% RH.                       |
|             | Range      | 0 °C to 50 °C,32 °F to 122 °F. |
| Temperature | Resolution | 0.1 degree                     |
|             | Accuracy   | °C ± 0.8 °C.                   |
|             |            | °F ± 1.5 °F.                   |

#### Dew Point Temp. ( Humidity )

| °C   | Range      | -25.3 °C to 48.9 °C   |
|--|------------|-----------------------|
|  | Resolution | 0.1 ℃                 |
| °F   | Range      | -13.5 °F to 120.1 °F. |
|  | Resolution | 0.1 °F.               |
| Remark:  |            |                       |
| * Dew Point display value is calculated from the           |            |                       |
| Humidity/Temp. measurement automatically.                  |            |                       |
| * The Dew Point accuracy is sum accuracy value of Humidity |            |                       |

#### & Temperature measurement.. Wet bulb Temp. ( Humidity )

| °C       | Range      | -21.6 °C to 50.0 °C  |
|----------|------------|----------------------|
|          | Resolution | 0.1 ℃                |
| °F       | Range      | -6.9 °F to 122.0 °F. |
|          | Resolution | 0.1 °F.              |
| Remark · |            |                      |

- \* Wet bulb display value is calculated from the Humidity/Temp.
- measurement automatically.

  \* The Welt bulb accuracy is sum accuracy value of Humidity

Temperature & Temperature measurement...

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