*+ Humidity/Temp., SD Card real time data recorder*

# $CO_2$METER one probe

**Model : CO2-9914SD** *ISO-9001, CE, IEC1010*






$CO_2$/Humidity/
Temp. probe




Lutron

https://tecpel.com Email: sales@tecpel.com Tel: 886-2-2218-3111

## SD Card real time data recorder + Humidity/Temp., one probe

# CO2 METER

## Model : CO2-9914SD

**FEATURES**

| |
|---|
| * 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 `1 probe 4 Function data ( CO2/Temp. , %RH/Temp. /Dew /Wet ) two group analog data 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 ), Humidity/Dew/Wet , temperature measurement. |
| * CO2 range : 0 to 10,000 ppm x 1 ppm. |
| * Humidity range: 10 to 95 %RH. x 0.1 % RH |
| * Dew point Temp. and Wet bulb Temp. measurement. |
| * Temp. range : 0 to 50.0 ℃, ℃/℉. |
| * CO2 sensor : NDIR, long term reliability. |
| * 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 1 probes : CO2/Temp.,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. |
| * Patented. |

**GENERAL SPECIFICATIONS**

| | | |
|---|---|---|
| Circuit | Custom one-chip of microprocessor LSI circuit. | |
| Display | LCD size : 52 mm x 38 mm (Dot Matrix) LCD with green backlight ( ON/OFF ). | |
| Measurement | CO2 (Carbon dioxide ) Humidity Dew point Temp., Wet bulb Temp. Temperature | |
| Sensor structure | CO2 | NDIR * Nondispersive infrared sensor |
| | Humidity | Precision capacitance sensor |
| | Temp. | Precision thermistor |
| Datalogger Sampling Time Setting range | Auto | 2 sec to 8 hour 59 min. 59 sec. @ Sampling time can set to 1 second, but memory data may loss. |
| | Manual | Push the data logger button once will save data one time. @ Set the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position ( Location ) no. |
| Data error no. | 0.1% of total saved data max. | |
| Memory Card | SD memory card. 1 GB to 16 GB. | |
| Advanced setting @ main setting | * SD memory card Format * Set clock time * Set sampling time * Auto power OFF management * Set beep Sound ON/OFF * Decimal point of SD card setting * Temp. unit setting * Alarm value setting * Altitude value setting | |
| Data Hold | Freeze the display reading. | |
| Memory Recall | Maximum & Minimum value. | |
| Sampling Time of Display | Approx. 1 second. | |
| 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. | |
| Power Supply | * Alkaline or heavy duty DC 1.5 V battery ( UM3, AA ) x 6 PCs, or equivalent. * DC 9V adapter input. ( AC/DC power adapter is optional ). | |
| Operating Temperature | 0 to 50 ℃. ( 32 to 122 ℉ ). | |
| Operating Humidity | Less than 80% R.H. | |
| Power Current | CO2 measure-ment | 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. |
| | Humidity measure-ment | Normal operation ( w/o SD card save 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. |
| | O2 or CO measure-ment | 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) : Approx. DC 42.5 mA. |
| | @ If LCD backlight on, the power consumption will increase approx. 12 mA. | |
| Weight | 350 g/0.77 LB. | |

| | | |
|---|---|---|
| Dimension | Meter | 177 x 68 x 45 mm |
| | CO2/Humidity probe | length 175 mm x ∮ 28 |
| Accessories Included | Instruction manual.....1 PC<br>Hard carrying case, CA-06.....1 PC<br>CO2 / Humidity probe.....1 PC | |
| Optional Accessories | SD memory card ( 4 GB )<br>AC to DC 9V adapter.<br>USB cable, USB-01.<br>RS232 cable, UPCB-02.<br>Data Acquisition software, SW-U801-WIN. | |

**ELECTRICAL SPECIFICATIONS (23± 5 ℃)**

CO2 ( Carbon dioxide )

| | | |
|---|---|---|
| CO2 ( Carbon dioxide ) 23 ± 5 ℃. | Range | 0 to 10,000 ppm |
| | Resolution | 1 ppm |
| | Accuracy | ± 40 ppm * ≦1,000 ppm.<br>± ( 50 ppm + 3% of reading ) * > 1,000 ppm ≦ 3,000 ppm.<br>± ( 50 ppm + 5% of reading ) * > 3,000 ppm, reference only |
| | Repeatability | ± 20 ppm * ≦ 3,000 ppm. |

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

Humidity/Temperature

| | | |
|---|---|---|
| Humidity | Range | 5 % to 95 % R.H. |
| | Resolution | 0.1 % R.H. |
| | Accuracy | ≧70% RH : ± (3% reading + 1% RH).<br>< 70% RH : ± 3% RH. |

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

Dew Point Temp. ( Humidity )

| | | |
|---|---|---|
| ℃ | Range | -25.3 ℃ to 48.9 ℃ |
| | Resolution | 0.1 ℃ |
| ℉ | Range | -13.5 ℉ to 120.1 ℉. |
| | Resolution | 0.1 ℉. |

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 )

| | | |
|---|---|---|
| ℃ | Range | -21.6 ℃ to 50.0 ℃ |
| | Resolution | 0.1 ℃ |
| ℉ | Range | -6.9 ℉ to 122.0 ℉. |
| | Resolution | 0.1 ℉. |

Remark :
* Wet bulb display value is calculated from the Humidity/Temp. measurement automatically.
* The Welt bulb accuracy is sum accuracy value of Humidity & Temperature measurement..

* Appearance and specifications listed in this brochure are subject to change without notice. 2012-CO29914

https://tecpel.com Email: sales@tecpel.com Tel: 886-2-2218-3111