SD Card real time data logger, Patent

CO_2 /HUMIDITY/TEMP. MONITOR

Model : MCH-383SD *ISO-9001, CE, IEC1010*

Lutron

LUTRON ELECTRONIC

The Art of Measurement

SD Card real time data logger

CO2 / HUMIDITY / TEMP. MONITOR

Model : MCH-383SD

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 CO2 (Carbon dioxide), Humidity and Temperature value in the same LCD.
* NDIR method principal for CO2 (Carbon dioxide) measurement, available for long term operation. high repeatability and high accuracy.
* 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.
* 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.
* Power supply from AC.DC 9V adapter in.
* RS232/USB computer interface.
* Patented

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 60 mm x 50 mm	
Measurement	CO2 (Carbon dioxide) Humidity and Temperature	
Unit	CO2	ppm
	Humidity	%RH
	Temp.	℃, ℉
CO2 Sensor Structure	NDIR	
Response Time for CO2 measurement	CO2 : < 2 min. typically. * Reach the 63% reading value * Depend the environment air circulation.	
Temperature Compensation	Automatic temp. compensation for CO2 measurement.	
Datalogger Sampling Time	5/10/30/60/120/300/600 seconds or Auto. * Default sampling time is 60 seconds. * The " Auto " sampling . means when the measuring value is changed (> ± 1 %RH or > ± 1 ℃ or ± 50 ppm) will save the data one time only.	
Data error no.	≦ 0.1 % no. of total saved data typically.	
Memory Card	SD memory card. 1 GB to 16 GB.	
Advanced setting 1	* SD memory card Format * Set clock time (Year/Month/Date, Hour/Minute/Second) * Set sampling time * Set beeper sound ON/OFF * Set SD card Decimal character * Select the Temp. unit to ℃ or ℉ * Set RS232 data output ON/OFF	
Advanced setting 2	* Set CO2 height (meter) compensation value * Set CO2 height (feet) compensation value	
Memory Card	SD memory card. 1 GB to 16 GB.	
Update Time of Display	Approx. 1 second if measuring data 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.	
Operating Temperature	0 to 50 ℃.	
Operating Humidity	Less than 90% R.H.	
Power Supply * Meter & probe	* DC 9V adapter input. (AC/DC power adapter is included).	
Power Supply * Clock backup battery	* Alkaline or heavy duty DC 1.5 V battery (UM4, AAA) x 6 PCs, or equivalent.	
Weight	Meter	240 g/0.53 LB.
	CO2 probe	158 g/0.35 LB.
Dimension	Meter	132 x 80 x 32 mm (5.2 x 3.1 x 1.3 inch)
	CO2 probe	132 x 38 x 32 mm
Accessories Included	Instruction manual.....1 PC CO2 probe.....1 PC AC to DC 9V adapter.....1 PC Main meter hanging unit (with sticker) .....1 PC CO2 hanging unit (with sticker).....1 PC	
Optional Accessories	SD Card (2 GB), SD-2GB. USB cable, USB-01. RS232 cable, UPCB-02. Data Acquisition software, SW-U801-WIN.	

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

CO2 (Carbon dioxide)

Range	0 to 4,000 ppm	
Resolution	1 ppm	
Accuracy	± 50 ppm	* ≦1,000 ppm.
	± 5% of reading	* > 1,000 ppm ≦ 3,000 ppm.
	± 250 ppm typically	* > 3,000 ppm, reference only

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 ℉ to 122 ℉.
Resolution	0.1 degree
Accuracy	℃ - ± 0.8 ℃, ℉ - ± 1.5 ℉.

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.