SD Card real time data logger, Patent

CO₂ /HUMIDITY/TEMP. MONITOR

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

Enter   **Time**   **Save File**

LOGGER   ▲   ▼

SET   *SD Card Data Logger*

CO₂ / Humidity / Temp. MONITOR

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, 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.
* DC 1.5V (UM-4, AAA) battery x 6 PCs or 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 seconds.
Advanced setting	* Set clock time (Year/Month/Date, Hour/Minute/ Second) * Decimal point of SD card setting * Set temperature unit to ℃ or ℉ * Set sampling time mode (power consumption mode). * SD memory card Format

Memory Card	SD memory card. 1 G to 16 G.
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 85% R.H.
Power Supply	DC 9V adapter input. (AC/DC power adapter is included).
Power Consumption	Approx. DC 9.6 mA for 90% period. Approx. DC 128 mA for 10% period.
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 AC to DC 9V adapter........................1 PC
Optional Accessories	SD Card (1 GB) SD Card (2 GB) 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	± 40 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 95 % R.H.
Resolution	0.1 % R.H.
Accuracy	≧70% RH : ± (3% reading + 1% RH). < 70% RH : ± 3% 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.