

SD Card real time data logger, Patent

CO₂ /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

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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 CO ₂ (Carbon dioxide), Humidity and Temperature value in the same LCD.
* NDIR method principal for CO ₂ (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	CO ₂ (Carbon dioxide) Humidity and Temperature	
Unit	CO ₂	ppm
	Humidity	%RH
	Temp.	°C, °F
CO ₂ Sensor Structure	NDIR	
Response Time for CO ₂ measurement	<i>CO₂ :</i> < 2 min. typically. <i>* Reach the 63% reading value</i> <i>* Depend the environment air circulation.</i>	
Temperature Compensation	Automatic temp. compensation for CO ₂ 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 °C or °F * 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. <i>* Connect the optional RS232 cable</i> <i>UPCB-02 will get the RS232 plug.</i> <i>* Connect the optional USB cable</i> <i>USB-01 will get the USB plug.</i>	
Operating Temperature	0 to 50 °C .	
Operating Humidity	Less than 85% R.H.	
Power Supply	DC 9V adapter input. (AC/DC power adapter is included).	
Power Consumption	<i>Approx. DC 9.6 mA for 90% period.</i> <i>Approx. DC 128 mA for 10% period.</i>	
Weight	Meter	240 g/0.53 LB.
	CO ₂ probe	158 g/0.35 LB.
Dimension	Meter	132 x 80 x 32 mm (5.2 x 3.1 x 1.3 inch)
	CO ₂ 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 °C)

CO₂ (Carbon dioxide)

Range	0 to 4,000 ppm	
Resolution	1 ppm	
Accuracy	± 40 ppm	<i>* ≤ 1,000 ppm.</i>
	± 5% of reading	<i>* > 1,000 ppm ≤ 3,000 ppm.</i>
	± 250 ppm typically	<i>* > 3,000 ppm, reference only</i>

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 °C to 50 °C, 32 °F to 122 °F.	
Resolution	0.1 degree	
Accuracy	°C - 0.8 °C, °F - 1.5 °F.	

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.

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