

*SD card real time data recorder
PM2.5, CO2, %RH, Temp., Barometer*

AIR QUALITY MONITOR/RECORDER

Model : PM-1064SD

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

AIR QUALITY MONITOR/RECORDER

Model : PM-1064SD

FEATURES

* Monitoring air pollutant source from dust, petrochemical industry, steel-making plant, thermal power plant, restaurant, smoke, burning plants, driving automobiles.
* The meter is a real-time air quality monitor instrument used to monitor the concentration of PM2.5, humidity and temperature in the indoor environment.
* PM2.5 : 0 to 250 $\mu\text{g}/\text{m}^3$, Humidity : 5 to 95 %RH, Temperature : 0 to 50 $^{\circ}\text{C}/^{\circ}\text{F}$. CO2 : 0 to 10,000 ppm, Barometer : 10 to 1100 hPa, mmHg, inHg.
* PM2.5 time weighted average reading.
* Data hold, Record(Max,Min)
* Alarm setting with the beeper sound output.
* Health index (0-9) detection and alarm.
* Built-in clock and Calendar, real time data record with SD memory card, sampling time can be set from 1 second to 3600 seconds. Just slot the SD card into the computer, all the measured values with the time information (year, month, date, hour, minute, second) can be downloaded to the Excel directly, then user can make the further data analysis by themselves.
* Manual data record is available, can set the different position(location) No.(1 to 99).
* SD card capacity : 1GB to 32GB.
* Dot matrix LCD display.
* Power by UM3/AA(1.5V) X 6 batteries or DC 9V adapter
* RS232/USB PC computer interface

SPECIFICATIONS

Circuit	Custom single-chip microprocessor LSI circuit.
Display	LCD Size: 2.18 X 2.87" (55.4 X 72.9 mm). Dot matrix backlit LCD (128 X 240 pixels).
Measurement	PM2.5 : 0 to 250 $\mu\text{g}/\text{m}^3$, Humidity : 5 to 95 %RH, CO2 : 0 to 10,000 ppm, Barometer : 10 to 1100 hPa, Temperature : 0 to 50 $^{\circ}\text{C}/^{\circ}\text{F}$.
Over-range	* LCD display show " OL ". * The data save into the Micro SD card will show " 999 " (overleap the decimal point).
Data Hold	Freezes displayed reading.
Memory Recall	Maximum & Minimum value.
Data Recording	SD memory card (1 GB to 32 GB).
Sampling Time	Approx. 1 second.
Data logger	* Real time data logger, saved the data into Micro SD memory card and down load the all the measured value with the time information (year/month/date/ hour/minute/second) down load to the Excel. * Sampling time for data logger : Auto: 2 seconds to 3600 seconds. 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. * When the system detects micro SD format does not match with the Machine that will be mandatory for reformatting to ensure that data records can be normal. * Data error no. : $\leq 0.1\%$ no. of total saved data typically.
Data Output USB/RS232	* Computer interface. * Connect the optional USB cable USB-01 will get the USB plug.. * Connect the optional RS232 cable UPCB-02 will get the RS232 plug.
Operating temperature	0 to 50 $^{\circ}\text{C}$ (32 to 122 $^{\circ}\text{F}$).
Operating humidity	Less than 80% R.H..
Power Supply	* DC 1.5V, AA (UM-3) Battery X 6 PCs (Alkaline or heavy-duty battery). * AC to DC 9V power adapter..
Power consumption	DC 135 mA approximately. Backlight ON approximately DC 150 mA.
Weight	385 g/0.85 LB.
Dimension	164 x 93 x 72 mm (6.5 x 3.7 x 2.8 inch). * Dimension is for the meter only (without terminals).
Accessories included	* Instruction manual..... 1 PC * AC to DC 9V power adapter..... 1 PC
Optional Accessories	* SD memory card (4 GB). * USB cable, USB-01. * RS232 cable, UPCB-02. * Data Acquisition software, SW-U801-WIN, SW-E802.

Electrical SPECIFICATIONS (23 \pm 5 $^{\circ}\text{C}$)

PM2.5 (Particulate matter)

Range	Resolution	Accuracy
0 to 250 $\mu\text{g}/\text{m}^3$	1 $\mu\text{g}/\text{m}^3$	\pm (10 % reading \pm 20 $\mu\text{g}/\text{m}^3$)

Humidity

Range	Resolution	Accuracy
5 % to 95 %RH	0.1 %RH	< 70 %RH: \pm 3 %RH

Temperature

Range	Resolution	Accuracy
0.0 $^{\circ}\text{C}$ to 50.0 $^{\circ}\text{C}$	0.1 $^{\circ}\text{C}$	\pm 0.8 $^{\circ}\text{C}$
32.0 $^{\circ}\text{F}$ to 122.0 $^{\circ}\text{F}$	0.1 $^{\circ}\text{F}$	\pm 1.5 $^{\circ}\text{F}$

CO2(Carbon dioxide)

Range	Resolution	Accuracy
0 to 10000 ppm	1 ppm	\pm 40 ppm, \leq 1000 ppm \pm (50 ppm + 3% of reading) > 1000 ppm \leq 3000 ppm \pm (50 ppm + 5% of reading) > 3000 ppm \leq 10000 ppm Repeatability: \pm 20 ppm > 3000 ppm \leq 10000 ppm

Barometric pressure (Barometer)

Unit	Range	Resolution	Accuracy
hPa	10.0 to 999.9	0.1 hPa	\pm 1.5 hPa
	1000 to 1100	1 hPa	\pm 2 hPa
mmHg	7.5 to 825.0	0.1mmHg	\pm 1.2 mmHg
inHg	0.29 to 32.48	0.01inHg	\pm 0.05 inHg