SD Card real time data recorder, + type K/J Temp.
Air flow (CMM, CFM)

ANEMOMETER

Model : AM-4307SD *ISO-9001, CE, IEC1010*

Lutron

LUTRON ELECTRONIC

The Art of Measurement

SD Card real time data logger
Air flow (CMM, CFM)
ANEMOMETER, + type K / J Temp.
Model : AM-4307SD

FEATURES

* One meter can accept two probes : Anemometer probe , Thermocouple probe.
* Air velocity : m/s, Ft/min, Km/h, Knot, Mile/h.
* Air flow (CFM, CMM) measurement.
* Air temperature (℃, ℉).
* Air Temp. used thermistor sensor, fast response time.
* Type K, Type J thermocouple thermometer.
* Real time SD memory card Datalogger, it Built-in Clock and Calendar, real time data recorder , sampling time set from 1 second to 3600 seconds.
* Manual datalogger is available (set the sampling time to 0), during execute the manual datalogger function, it can set the different position (location) No. (position 1 to position 99).
* Innovation and easy operation, computer is not need to setup extra software, after execute datalogger, just take away the SD card from the meter and plug in the SD card into the computer, it can down load the all the measured value with the time information (year/month/date/ hour/minute/second) to the Excel directly, then user can make the further data or graphic analysis by themselves.
* SD card capacity : 1 GB to 16 GB.
* LCD with green light backlight, easy reading.
* Can default auto power off or manual power off.
* Data hold, record max. and min. reading.
* Microcomputer circuit, high accuracy.
* Power by UM3/AA (1.5 V) x 6 batteries or DC 9V adapter.
* RS232/USB PC COMPUTER interface.
* Separate probe, easy for operation.
* Applications : Environmental testing, HVAC, Air conveyors, Flow hoods, Clean rooms, Air velocity, Air balancing, Fans/motors/blowers, Furnace velocity, Refrigerated case, Paint spray booths . measurements

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 52 mm x 38 mm LCD with green backlight (ON/OFF).	
Measurement Unit	Air velocity: m/s (meters per second) Km/h (kilometers per hour) Ft/min (FPM, feet per minute) Knots (nautical miles per hour) Mile/h (mph, miles per hour)	
	Air flow : CFM, CMM * CFM : cube feet per minute * CMM : cube meters per minute ℃, ℉	
	Type K/ Type J thermometer :℃, ℉	
	Air temperature: ℃, ℉	
Datalogger Sampling Time Setting range	Auto	1 second to 3600 seconds @ 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.
Memory Card	SD memory card. 1 GB to 16 GB. * It recommend use memory card ≦ 4 GB.	
Advanced setting	* Set clock time (Year/Month/Date, Hour/Minute/ Second) * Set sampling time * Auto power OFF management * Set beep Sound ON/OFF * Decimal point of SD card setting * SD memory card Format * Set thermometer type to Type K or Type J * Set temperature unit to ℃ or ℉ * Set air flow type (CFM/USA, CMM/EURO) * Set air flow area dimension	
Temperature Compensation	Automatic temp. compensation for the Anemometer function and the type K/J thermometer.	
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.
Operating Temperature	0 to 50 ℃.
Operating Humidity	Less than 85% R.H.
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).
Power Current	Normal operation (w/o SD card save data and LCD Backlight is OFF) : Approx. DC 30 mA. When SD card save the data and LCD Backlight is OFF) : Approx. DC 50 mA.
Weight	347 g/ 0.76 LB. * Meter only
Dimension	Main instrument : 182 x 73 x 47.5 mm (7.1 x 2.9 x 1.9 inch) Anemometer sensor probe : Round, 72 mm Dia .
Accessories Included	* Instruction manual.....1 PC * Anemometer probe.....1 PC * Hard carrying case (CA-06).....1 PC
Optional Accessories	* SD Card (4 G) * Type K thermocouple probes, refer to page 27. * AC to DC 9V adapter. * USB cable, USB-01. * RS232 cable, UPCB-02. * Data Acquisition software, SW-U801-WIN. * Excel Data Acquisition software, SW-E802

ELECTRICAL SPECIFICATIONS (23± 5℃)

Air velocity

Measurement	Range	Resolution	Accuracy
m/s	0.2 to 5.0 m/s	0.01 m/s	± (5% + a)
	5.1 to 25.0 m/s	0.1 m/s	reading
Km/h	0.70 to 18.00 km/h	0.01 Km/h	
	18.0 to 72.0 km/h	0.1 Km/h	or
Mile/h	0.50 to 11.20 mph	0.01 mph	± (1% + a)
(MPH)	11.2 to 44.7 mph	0.1 mph	full scale
Knot	0.40 to 9.70 knot	0.01 Knot	
	9.7 to 38.8 knot	0.1 Knot	
Ft/min	40-3940 ft/min	1 Ft/min	

@ a = 0.1 m/s, 0.3 km/h, 0.2 mile/h, 0.2 knot, 20 ft/min

Note:
m/s - meters per second km/h - kilometers per hour
ft/min - feet per minute knot - nautical miles per hour
mile/h - miles per hour (INTERNATIONAL KNOT)

Air temperature

Measuring Range	0 ℃ to 50 ℃/32 ℉ to 122 ℉
Resolution	0.1 ℃/0.1 ℉
Accuracy	± 0.8 ℃/1.5 ℉

Air flow

Measurement	Range	Resolution
CMM (m^3/min.)	0 to 54,000 CMM	0.001 to 1 CMM
CFM (ft^3/min.)	0 to 1,907,000 CFM	0.001 to 100 CFM

Measurement	Area
CMM (m^3/min.)	0.001 to 30.000 m^2
CFM (ft^3/min.)	0.01 to 322.93 ft^2

Type K / J thermometer

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 ℃	-50.0 to 1300.0 ℃	± (0.4 % + 0.5 ℃)
		-50.1 to -100.0 ℃	± (0.4 % + 1 ℃)
	0.1 ℉	-58.0 to 2372.0 ℉	± (0.4 % + 1 ℉)
		-58.1 to -148.0 ℉	± (0.4 % + 1.8 ℉)
Type J	0.1 ℃	-50.0 to 1200.0 ℃	± (0.4 % + 0.5 ℃)
		-50.1 to -100.0 ℃	± (0.4 % + 1 ℃)
	0.1 ℉	-58.0 to 2192.0 ℉	± (0.4 % + 1 ℉)
		-58.1 to -148.0 ℉	± (0.4 % + 1.8 ℉)