## D card real time data recorder, + type K/J Temp.

Mini vane, Air flow (CMM, CFM)

# ANEMOMETER

Model: AM-4233SD

ISO-9001, CE, IEC1010

www.yalab.com.tw

02-2389-0101











The Art of Measurement

### SD Card real time data recorder, Air flow ( CMM, CFM )

## Mini vane ANEMOMETER + type K/JTemp.

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#### **FEATURES**

* Mini vane with 35mm Dia., lowfriction ball bearing mounted
wheel design provides high accuracy at high and low air
velocity.
* Telescope probe, extension length 620 mm max.
* Replacement anemometer van set.
* Air velocity: m/s, Ft/min, Km/h, Knot, Mile/h,
* Air flow ( CFM, CMM ) measurement.
* Air temperature ( °C, °F )
* Air Temp. used thermistor sensor, fast response time.
* Fast humidity measuring 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**

Custom one-chip of microprocessor LSI		
circuit.		
LCD size : 52 mm x 38 mm		
LCD with green backlight ( ON/OFF ).		
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		
* CFM : cube meters per minute		
Type K/ Type J thermometer :°C, °F Air temperature: °C, °F		
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.		
SD memory card. 1 GB to 16 GB.		
* It recommend use memory card $\leq$ 4 GB.		
* 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 °C or °F * Set air flow type ( CFM/USA, CMM/EURO )		
* Set air flow type ( CFM/OSA, CMM/EORO )  * Set air flow area dimension		
Automatic temp. compensation for the		
type K/J thermometer.		
Freeze the display reading. Maximum & Minimum value.		
Approx. 1 second.		
Approx. 1 Securio.		
0 to 50 ℃.		
0 to 50 °C.		

Operating	Less than 85% R.H.		
Humidity	Ecss than 65 % K.H.		
Data Output	RS 232/USB PC computer interface.		
Data Output	* Connect the optional RS232 cable		
	UPCB-02 will get the RS232 plug.		
	* Connect the optional USB cable		
	USB-01 will get the USB plug.		
Power Supply	* Alkaline or heavy duty DC 1.5 V battery		
rower Supply	( UM3, AA ) x 6 PCs, or equivalent.		
	, , ,		
	* DC 9V adapter input. ( AC/DC power		
Dawar Current	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):		
\\/a:= a4	Approx. DC 50 mA. 347 g/ 0.76 LB. * Meter only		
Weight	- 3, ,		
Dimension	Main instrument :		
	182 x 73 x 47.5 mm		
	(7.1 x 2.9 x 1.9 inch)		
	Anemometer sensor probe :		
	Round, 35 mm Dia .		
Accessories	* Instruction manual 1 PC		
Included	* Anemometer probe1 PC		
	* Soft carrying case (CA-05B)1 PC		
Optional	* SD Card ( 4 G ).		
Accessories	* Replacement anemometer van set.		
	* Type K thermocouple probes.		
	* 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 $\pm$ 5 $^{\circ}$ C)

#### Air velocity

Measurement	Range	Resolution	Accuracy
m/s	0.4 to 20.0 m/s	0.1 m/s	± (5% + a) reading
Km/h	1.4 to 72.0 km/h	0.1 Km/h	or
Mile/h (MPH )	1.0 to 44.7 mph	0.1 mph	± (1% + a) full scale
Knot	0.8 to 38.8 knot	0.1 knot	
Ft/min	78-3940 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 knot - nautical miles per hour (INTERNATIONAL KNOT)			

#### Air temperature

Measuring Range	0 °C to 50 °C/32 °F to 122 °F
Resolution	0.1 °C/0.1 °F
Accuracy	± 0.8 °C/1.5 °F

#### 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	Resolution	Range	Accuracy
Type			
Туре К	0.1 ℃	-50.0 to 1300.0 °C	± (0.4 % + 0.5 °C)
		-50.1 to -100.0 °C	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2372.0 °F	± (0.4 % + 1 °F)
		-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)
Type J	0.1 ℃	-50.0 to 1200.0 °C	± (0.4 % + 0.5 °C)
		-50.1 to -100.0 °C	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2192.0 °F	± (0.4 % + 1 °F)
		-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)

<sup>\*</sup> Appearance and specifications listed in this brochure are subject to change without notice.