SD card real time data recorder, + type K/J Temp., Patent

# ANEMOMETER

Model: AM-4207SD *ISO-9001, CE, IEC1010* 











## SD Card real time data logger

# **ANEMOMETER**, + type K/J Temp.

Model: AM-4207SD

#### **FEATURES**

*	Air velocity: m/S, Ft/min, Km/h, Knots, Mile/h,
*	Air temperature (°C, °F)
*	Low-friction ball vane wheels make sure high accuracy
	in high & low velocities.
*	Type K, Type J thermocouple thermometer.
*	Air Temp. used thermistor sensor, fast response time.
*	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 of different
	measurement environment.
*	Wide applications: use this anemometer to check air
	conditioning & heating systems, measure air velocities,
L	wind temperatureetc.

#### **GENERAL SPECIFICATIONS**

Circuit		one-chip of microprocessor LSI		
	circuit.			
Display	LCD size	LCD size: 52 mm x 38 mm		
	LCD with green backlight ( ON/OFF ).			
Measurement	Air veloc	Air velocity:		
Unit	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 temp	Air temperature:		
	°C, °F			
	Type K/ Type J thermometer.			
	°C, °F			
Datalogger	Auto	1 second to 3600 seconds		
Sampling Time		@ Sampling time can set to 1 second,		
Setting range		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.		
Advanced		* Set clock time ( Year/Month/Date,		
setting	Hour/Minute/ Second )			
	* Decimal point of SD card setting			
	* Auto power OFF management			
	* Set beep Sound ON/OFF			
	* Set thermometer type to Type K or Type J			
	* Set temperature unit to $^{\circ}\mathbb{C}$ or $^{\circ}\mathbb{F}$			
	* Set sampling time			
5	* SD memory card Format			
Data Hold	ne display reading.			

Temperature	Automatic temp. compensation ( cold		
Compensation	junction compensation ) for the type K/J		
	thermometer.		
Memory Recall	Maximum & Minimum value.		
Sampling Time	Approx. 1 second.		
of Display			
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	0 to 50 ℃.		
Temperature			
Operating	Less than 85% R.H.		
Humidity			
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 15 mA.		
	When SD card save the data and LCD		
	Backlight is OFF) :		
	Approx. DC 36 mA.		
Weight	515 g/ 1.13 LB.		
Dimension	Main instrument :		
	203 x 76 x 38 mm		
	Anemometer sensor head :		
	Round, 72 mm Dia.		
Accessories	* Instruction manual 1 PC		
Included	* Anemometer probe 1 PC		
	* Hard carrying case (CA-06)1 PC		
Optional	SD Card (1 G)		
Accessories	SD Card (2 G)		
	Type K thermocouple probe.		
	AC to DC 9V adapter.		
	USB cable, USB-01.		
	RS232 cable, UPCB-02.		
	Data Acquisition software, SW-U801-WIN.		

#### ELECTRICAL SPECIFICATIONS (23±5°C)

### Air velocity

Measurement	Range	Resolution	Accuracy
m/S	0.4 - 25.0 m/s	0.1 m/S	± (2%+0.2 m/S)
Km/h	1.4 - 90.0 km/h	0.1 Km/h	± (2%+0.8 Km/h)
mph ( Mile/h )	0.9 - 55.9 mile/h	0.1 mph	± (2%+0.4 mph)
Knots	0.8 - 48.6 knots	0.1 Knots	± (2%+0.4 Knots)
FPM ( Ft/min )	80 - 4930 ft/min	1 FPM	± (2%+40 FPM)

#### Air temperature

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

#### Type K/J thermometer

Sensor	Resolution	Range	Accuracy
Туре			
Type K	0.1 ℃	-50.0 to 1300.0 ℃	± (0.4 % + 0.5 °C)
		-50.1 to -100.0 ℃	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2372.0 °F	± (0.4 % + 1 °F)
		-58.1 to -148.0 °F	$\pm$ (0.4 % + 1.8 $^{\circ}$ F)
Type J	0.1 ℃	-50.0 to 1200.0 ℃	± (0.4 % + 0.5 °C)
		-50.1 to -100.0 ℃	± (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)

PATENT CHINA : ZL 2008 2 0189918.5 ZL 2008 2 0189917.0 Germany : Nr. 20 2008 016 337.4 JAPAN : 3151214

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