

**Air velocity, Air Flow, Type K/J Thermometer  
Real Time Data Logger, metal vane**

# **ANEMOMETER**

**Model : YK-2005AM**

*ISO-9001, CE, IEC1010*

*www.yalab.com.tw*

*02-2389-0101*



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***The Art of Measurement***

# ANEMOMETER

Model : YK-2005AM

## 1. FEATURES

* Air velocity : m/S, Ft/min, Km/h, Knots, Mile/h,
* Air flow : CMM ( m <sup>3</sup> /min. ) and CFM ( ft <sup>3</sup> /min. ).
* Air temperature ( °C, °F )
* Type K/ Type J thermocouple thermometer.
* Real time data logger, build in clock ( hour-min.-sec., year-month-date ).
* Auto data record, 16,000 Data logger no.
* Wide sampling time adjustment range from two seconds to 8 hours 59 minutes 59 seconds.
* RS232 computer interface.
* Can default auto power off or manual power off.
* Can default the air velocity, air flow, Temp. unit.
* Air flow measurement can set the area dimension.
* Multi function with easy operation
* Low-friction ball vane wheels make sure high accuracy in high & low velocities.
* Metal vane, high reliability.
* Large LCD with multiple display.
* Data hold, record max. and min. reading.
* Microcomputer circuit provides special function & offer high accuracy.
* Air Temp. used thermistor sensor, fast response time.
* Power by UM3 ( 1.5 V ) x 4 batteries or DC 9V adapter.
* RS232 PC serial interface.
* Separate probe, easy for operation of different measurement environment.
* Wide applications: use this anemometer to check air conditioning & heating systems, measure air velocities, wind temperature...etc.

Memory Recall	Maximum & Minimum value.
Sampling Time of display	Approx. 1 second.
Power off	Auto shut off saves battery life or manual off by push button.
Data Output	RS 232 PC serial interface.
Operating Temperature	0 to 50 °C.
Operating Humidity	Less than 80% R.H.
Power Supply	DC 1,5 V battery ( UM3 ) x 4 PCs, ( Heavy duty type ). DC 9V adapter input. @ AC/DC power adapter is optional.
Power Current	Approx. DC 21.5 mA @ Main instrument. DC 27.5 mA. @ Main instrument. + Anemometer probe.
Weight	515 g/ 1.13 LB. @ Battery is included.
Dimension	Main instrument : 203 x 76 x 38 mm Anemometer sensor head : Round, 72 mm Dia.
Accessories Included	Instruction manual.....1 PC Anemometer probe..... 1 PC Carrying case.....1 PC
Optional Accessories	Type K thermocouple probe. AC to DC 9V adapter. RS232 cable/UPCB-02, USB cable/USB-01 Data Acquisition software, SW-U801-WIN. Data Logger software, SW-DL2005.

## 2-1 General Specifications

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 58 mm x 34 mm.
Measurement Unit	Air velocity: m/S (meters per second) Km/h (kilometers per hour) Ft/min (feet per minute) Knots (nautical miles per hour) Mile/h (miles per hour) Air flow: CMM (m <sup>3</sup> /min., cube meter per min.) CFM (m <sup>3</sup> /min., cube feet per min.) Air temperature: °C, °F Type K/ Type J thermometer. °C, °F
Sampling Time of Data Logger	2 sec to 8 hour 59 min. 59 sec. @ Auto datalogger
Sensor Structure	Air velocity & Air flow : Conventional twisted van arm and low friction ball bearing design, vane use metal material. Air temperature : Thermistor. Type K/ Type J thermometer. Thermocouple
Temperature Compensation	Automatic temp. compensation for the Type K/J thermometer.
Data Hold	Freeze the display reading.

## 2-2 Electrical Specifications (23± 5 °C)

Air velocity			
Measurement	Range	Resolution	Accuracy
m/S	0.4 - 30.0 m/s	0.1 m/S	± ( 2%+0.2 m/S)
Km/h	1.4 - 126.0 km/h	0.1 Km/h	± ( 2%+0.8 Km/h)
Mile/h	0.9 - 78.3 mph	0.1 Mile/h	± ( 2%+0.4 Mile/h)
Knots	0.8 - 68.0 knots	0.1 Knots	± ( 2%+0.4 Knots)
Ft/min	79 - 6890 ft/min	1 Ft/min	± ( 2%+40 Ft/min)

Air flow			
Measurement	Range	Resolution	Area
CMM (m <sup>3</sup> /min.)	0-999,900 m <sup>3</sup> /min.	0.001-100	0.001-9,999 m <sup>3</sup> /min.
CFM (ft <sup>3</sup> /min.)	0-999,900 ft <sup>3</sup> /min.	0.001-100	0.001-9,999 ft <sup>3</sup> /min.

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

Type K/J thermometer			
Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.0 to 1300.0 °C	± ( 0.2 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.2 % + 1 °C )
	0.1 °F	-58.0 to 2372.0 °F	± ( 0.2 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.2 % + 1.8 °F )
Type J	0.1 °C	-100.0 to 1100.0 °C	± ( 0.2 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.2 % + 1 °C )
	0.1 °F	-58.0 to 2012.0 °F	± ( 0.2 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.2 % + 1.8 °F )

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

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