

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

ANEMOMETER

Model : YK-2005AM

ISO-9001, CE, IEC1010



Lutron

LUTRON ELECTRONIC

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 ³ /min.) and CFM (ft ³ /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 or manual 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.

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 * main instrument	DC 1,5 V battery (UM3) x 4 PCs, (Heavy duty type). DC 9V adapter input. <i>@ AC/DC power adapter is optional.</i>
Power Supply * clock module	DC 3V silver battery. Type : CR2032.
Power Current	Approx. DC 21.5 mA <i>@ Main instrument.</i> DC 27.5 mA. <i>@ Main instrument. + Anemometer probe.</i>
Weight	515 g/ 1.13 LB. <i>@ Battery is included.</i>
Dimension	<i>Main instrument :</i> 203 x 76 x 38 mm <i>Anemometer sensor head :</i> Round, 72 mm Dia.
Accessories Included	Instruction manual.....1 PC Anemometer probe.....1 PC DC 3V silver battery, CR2032..... 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	<i>Air velocity:</i> 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) <i>Air flow:</i> CMM (m ³ /min., cube meter per min.) CFM (m ³ /min., cube feet per min.) <i>Air temperature:</i> °C, °F <i>Type K/ Type J thermometer.</i> °C, °F	
Sampling Time of Data Logger	Manual	Push the data logger button once will save data one time. <i>@ Set the sampling time to 0 second</i>
	Auto	2 sec to 8 hour 59 min. 59 sec.
Sensor Structure	<i>Air velocity & Air flow :</i> Conventional twisted van arm and low friction ball bearing design, vane use metal material.	
	<i>Air temperature :</i> Thermistor.	
	<i>Type K/ Type J thermometer.</i> Thermocouple	
Temperature Compensation	Automatic temp. compensation for the Type K/J thermometer.	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	

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 ³ /min.)	0-999,900 m ³ /min.	0.001-100	0.001-9,999 m ³ /min.
CFM (ft ³ /min.)	0-999,900 ft ³ /min.	0.001-100	0.001-9,999 ft ³ /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)