

*Air velocity, Air Flow (CMM, CFM), Type K/J Thermometer
Real Time Data Logger with clock*

HOT WIRE ANEMOMETER

Model : YK-2005AH

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

**Air velocity, Air flow, Type K/J thermometer
Real time data logger, 16000 Data logger no., RS232**

HOT WIRE ANEMOMETER

Model : YK-2005AH

FEATURES

* Combination of hot wire and standard thermistor, deliver rapid and precise measurements even at low air velocity value.
* Slim probe, ideal for grilles & diffusers.
* Air velocity : m/S, Ft/min, Km/h, Knot, 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 data record, 16,000 Data logger no.
* Wide sampling time adjustment range from two seconds to 8 hours 59 minutes 59 seconds.
* Zero adjustment.
* 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.
* 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 computer interface.
* Separate probe, easy for remote measurement.
* Applications : Environmental testing, Air conveyors, Flow hoods, Clean rooms, Air velocity, Air balancing, Fans/motors/blowers, Furnace velocity, Refrigerated case, Paint spray booths.

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) Knot (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	2 sec to 8 hour 59 min. 59 sec. @ Auto datalogger
Sensor Structure	<i>Air velocity & Air flow :</i> Tiny glass bead thermistor. <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.
Sampling Time of display	Approx. 1 second.

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

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. Approx. DC 70 mA @ Main instrument. + Hot wire probe.
Weight	515 g/ 1.13 LB. @ Battery is included.
Dimension	<i>Main instrument :</i> 203 x 76 x 38 mm <i>Telescope Probe :</i> Round, 12 mm Dia x 280 mm (min. length). Round, 12 mm Dia x 940 mm (max. length).
Accessories Included	Instruction manual..... 1 PC Telescope 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.

ELECTRICAL SPECIFICATIONS (23± 5 °C)

<i>Air velocity</i>			
Measurement	Range	Resolution	Accuracy
m/S	0.2 to 20.0 m/s	0.1 m/S	± (5% + a) reading
Km/h	0.7-72.0 km/h	0.1 Km/h	
Mile/h	0.5-44.7 mph	0.1 Mile/h	or ± (1% + a) full scale
Knot	0.4-38.8 knot	0.1 Knot	
Ft/min	40-3940 ft/min	1 Ft/min	
@ a = 0.1 m/s, 0.1 km/h, 0.1 mile/h, 0.1 knot, 10 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)			

<i>Air flow</i>			
Measurement	Range	Resolution	Area
CMM (m ³ /min.)	0 to 36,000 m ³ /min.	0.001-1	0.001-30.0 m ³ /min.
CFM (ft ³ /min.)	0 to 1,271,200 ft ³ /min.	0.01-100	0.01-322.91 ft ³ /min.

<i>Air temperature</i>	
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

<i>Type K/J thermometer</i>			
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)

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