

*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.

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. @ AC/DC power adapter is optional.
Power Supply * clock module	DC 3V silver battery. Type : CR2032.
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	Main instrument : 203 x 76 x 38 mm Telescope Probe : 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 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.

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 (ft ³ /min., cube feet per min.) <i>Air temperature:</i> °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	<i>Air velocity & Air flow :</i> Tiny glass bead thermistor. <i>Air temperature :</i> Thermistor. Type K/ Type J thermometer. 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.
Power off	Auto shut off saves battery life or manual off by push button.

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)

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

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