

*air flow, CMM, CFM*

# **HOT WIRE ANEMOMETER**

**Model : YK-2004AH**

*ISO-9001, CE, IEC1010*



## **FEATURES**

- \* Air velocity, Air flow, Temperature
- \* High precision for low air velocity measurement.
- \* Telescope and separate probe, easy operation.
- \* 0.2 to 20.0 m/s. CMM, CFM.
- \* Max., Min., Data hold.
- \* RS-232 computer interface



**Lutron**

**LUTRON ELECTRONIC**

*The Art of Measurement*

# HOT WIRE ANEMOMETER

Model : YK-2004AH

## 1. 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, Knots, Mile/h,
* Air flow : CMM ( m <sup>3</sup> /min. ) and CFM ( ft <sup>3</sup> /min. ).
* Air temperature ( °C, °F )
* 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.
* 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 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.

## 2. 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 <sup>3</sup> /min., cube meter per min. ) CFM ( m <sup>3</sup> /min., cube feet per min. ) <i>Air temperature:</i> °C, °F
Sensor Structure	<i>Air velocity &amp; Air flow :</i> Tiny glass bead thermistor. <i>Air temperature :</i> Thermistor.
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.

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, <i>* main instrument</i> ( Heavy duty type ). DC 9V adapter input. <i>@ AC/DC power adapter is optional.</i>
Power Current	Approx. DC 21.5 mA <i>@ Main instrument.</i> Approx. DC 70 mA <i>@ Main instrument. + Hot wire probe.</i>
Weight	515 g/ 1.13 LB. <i>@ Battery is included.</i>
Dimension	<i>Main instrument :</i> 2000 x 762 x 368 mm <i>Telescope Probe :</i> * Round, 12 mm Dia x 940 mm ( max. length ). * Cable length ( under the condition that telescope probe already extend to max. length ). 1120 mm
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.

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

Air velocity			
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
Knots	0.4-38.8 knots	0.1 Knots	± ( 1% + a )
Ft/min	40-3940 ft/min	1 Ft/min	full scale

@ a = 0.1 m/s, 0.1 km/h, 0.1 mile/h, 0.1 knots, 10 ft/min

Note:	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      (international knot)
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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

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