

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 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 ³ /min.) and CFM (ft ³ /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	<p><i>Air velocity:</i></p> <p>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)</p> <p><i>Air flow:</i></p> <p>CMM (m³/min., cube meter per min.) CFM (m³/min., cube feet per min.)</p> <p><i>Air temperature:</i></p> <p>°C, °F</p>
Sensor Structure	<p><i>Air velocity & Air flow :</i></p> <p>Tiny glass bead thermistor.</p> <p><i>Air temperature :</i></p> <p>Thermistor.</p>
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	<p><i>Main instrument :</i> 2000 x 762 x 368 mm <i>Telescope Probe :</i></p> <ul style="list-style-type: none"> * 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	<p>Instruction manual.....1 PC Telescope Probe.....1 PC Carrying case.....1 PC</p>
Optional Accessories	<p>Type K thermocouple probe. AC to DC 9V adapter. RS232 cable/UPCB-02, USB cable/USB-01 Data Acquisition software, SW-U801-WIN.</p>

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)	
Km/h	0.7-72.0 km/h	0.1 Km/h	reading	
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	
<i>@ a = 0.1 m/s, 0.1 km/h, 0.1 mile/h, 0.1 knots, 10 ft/min</i>				
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)		

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		