

+ type K/J Temperature measurement

ANEMOMETER

Model : AM-4210

ISO-9001, CE, IEC1010



Lutron

LUTRON ELECTRONIC

The Art of Measurement

ANEMOMETER + type K/J Temp.

Model : AM-4210

1. FEATURES

* Microprocessor circuit ensures high accuracy and provides special functions and features.
* Dual function display, show air velocity value and the Temp. value at the same time.
* Low-friction ball vane wheels is accurate in both high and low velocities.
* The portable anemometer provides fast, accurate readings, with digital readability and the convenience of a remote probe separately.
* Five air velocity measurement units : m/s, km/h, ft/min, knots, mile/h.
* Anemometer show the display unit with default.
* 2 in 1, Anemometer + Thermometer (type K/J).
* Thermocouple Thermometer can accept type K or type J Temp. probe with default.
* Thermometer can default the display unit to °C or °F with default.
* Meter can default auto power off or manual power off.
* 0.1 degree resolution for temperature measurement.
* Microcomputer circuit provides intelligent function and high accuracy.
* Manual and auto data logger, with flexible sampling time selection, can save max. 1,600-point data.
* Records Maximum and Minimum readings with recall.
* Data hold function for freezing the desired value.
* Build in the input socket for DC 9V power adapter.
* RS232 PC serial interface.
* Few panel buttons, easy operation.
* Built-in low battery indicator.

2. GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 44 mm x 29 mm dual function LCD display.
Function	* Anemometer * Thermocouple Thermometer (Type K/J).
Anemometer	Measurement : 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) Temperature (°C, °F) Sensor : Air velocity sensor : Conventional twisted vane arms and low-friction ball-bearing design. Temperature sensor : Precision thermistor.
Thermocouple Thermometer	Thermocouple : Type K, Type J. Unit : °C, °F Resolution : 0.1 degree. Temperature Compensation : Automatic temp. compensation for the cold junction both type K/J thermometer Linear Compensation Linear Compensation for the full range.
Sampling Time of Data Logger	Manual Push the data logger button once will save data one time. * Set sampling time to 0 second. Auto 2, 5, 10, 30, 60, 600, 1800, 3600 seconds.
Data Logger number	Max. 1,600-point Data logger
Thermometer Input Socket	Standard two pins thermocouple socket.
Over Indication	Show " - - - - - ".
Data Hold	Freeze the display reading.
Memory Recall	Maximum & Minimum value.
Sampling Time of display	Approx. 1 second.
Power off	Auto shut off to save 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	006P DC 9V battery (Alkaline or Heavy duty type). DC 9V adapter input. * AC/DC power adapter is optional.
Power Current	Anemometer : Approx. DC 10.5 mA. Thermocouple Thermometer : Approx. DC 6.8 mA.
Weight	322 g/0.71 LB. * Include light probe and battery.
Dimension	Meter 135 x 60 x 33 mm. (5.3 x 2.4 x 1.3 inch). Probe Round, 72 mm Dia. Sensor Head

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

Accessories Included	Instruction manual.....1 PC Anemometer probe.....1 PC
Optional Accessories	* Type K thermocouple probe. TP-01, TP-02A, TP-03, TP-04 * AC to DC 9V adapter. * RS232 cable, UPCB-02. * USB cable, USB-01 * Data Acquisition software, SW-U801-WIN. * Data Logger software, SW-DL2005. * Carrying case, CA-05A.

3. ELECTRICAL SPECIFICATIONS (23± 5 °C)

Anemometer

A. Air velocity

Measurement	Range	Resolution	Accuracy
m/s	0.4 - 25.0 m/s	0.1 m/s	± (2%+0.2m/s)
km/h	1.4 - 90.0 km/h	0.1 km/h	± (2%+0.8km/h)
mile/h	0.9 - 55.9 mile/h	0.1 mile/h	± (2%+0.4mile/h)
knots	0.8 - 48.6 knots	0.1 knots	± (2%+0.4knots)
ft/min	80 - 4930 ft/min	1 ft/min	± (2%+40 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)

B. Temperature

Range	0 °C to 50 °C, 32 °F to 122 °F.
Resolution	0.1 degree
Accuracy	°C - 0.8 °C. °F - 1.5 °F.

Thermocouple Thermometer (type K/J)

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.0 to 1300.0 °C	± (0.4 % + 0.8 °C)
		-50.1 to -199.9 °C	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2372.0 °F	± (0.4 % + 1.5 °F)
Type J	0.1 °C	-100.0 to 1100.0 °C	± (0.4 % + 0.8 °C)
		-50.1 to -199.9 °C	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2012.0 °F	± (0.4 % + 1.5 °F)
		-58.1 to -327.8 °F	± (0.4 % + 1.8 °F)

* Accuracy value is specified for the meter only.

* Temp. probe (Type K, TP-01 TP-02A, TP-03, TP-04) is the optional accessories.

4. OPTIONAL ACCESSORIES

Carrying case CA-05A	Soft carrying case with sash. (260 x 110 x 55 mm)
Carrying case CA-06	Hard carrying case. (280 x 195 x 65 mm)
RS232 cable UPCB-02	Interface cable (isolated cable) that used to connect the meter to the computer (COM port).
USB cable USB-01	Interface cable that used to connect the meter to the computer (USB port).
Data Logger software SW-DL2005	* Software the used to download the data logger (data recorder) from the meter to computer.
Data Acquisition software SW-U801-WIN	* The SW-U801-WIN is a multi displays (1/2/4/6/8 displays) powerful application software, provides the functions of data logging system, text display, angular display, chart display, data recorder high/low limit, data query, text report, chart report.. .xxx.mdb data file can be retrieved for EXCEL, ACCESS..., wide intelligent applications.
(Type K) TP-01	* Max. short-tern operating Temperature: 300 °C (572 °F). * It is an ultra fast response naked-bead thermocouple suitable for many general purpose application.
Thermocouple Probe (Type K), TP-02A	* Measure Range: -50 °C to 900 °C, -50 °F to 1650 °F. * Dimension: 10cm tube, 3.2mm Dia.
Thermocouple Probe (Type K), TP-03	* Measure Range: -50 °C to 1200 °C, -50 °F to 2200 °F. * Dimension: 10cm tube, 8mm Dia.
Surface Probe (Type K), TP-04	* Measure Range: -50 °C to 400 °C, -50 °F to 752 °F. * Size : Temp. sensing head - 15 mm Dia. Probe length - 120 mm.