*SD card real time data recorder, + type K/J Temp., Patent*

# ANEMOMETER

**Model : AM-4207SD**          *ISO-9001, CE, IEC1010*



**The Art of Measurement**

LUTRON ELECTRONIC

# SD Card real time data logger
# ANEMOMETER, + type K/J Temp.
## Model : AM-4207SD

## FEATURES

* Air velocity : m/S, Ft/min, Km/h, Knots, Mile/h,
* Air temperature ( ℃, ℉ )
* Low-friction ball vane wheels make sure high accuracy in high & low velocities.
* Type K, Type J thermocouple thermometer.
* Air Temp. used thermistor sensor, fast response time.
* Real time SD memory card Datalogger, it Built-in Clock and Calendar, real time data recorder , sampling time set from 1 second to 3600 seconds.
* Manual datalogger is available ( set the sampling time to 0 ), during execute the manual datalogger function, it can set the different position ( location ) No. ( position 1 to position 99 ).
* Innovation and easy operation, computer is not need to setup extra software, after execute datalogger, just take away the SD card from the meter and plug in the SD card into the computer, it can down load the all the measured value with the time information ( year/month/date/ hour/minute/second ) to the Excel directly, then user can make the further data or graphic analysis by themselves.
* SD card capacity : 1 GB to 16 GB.
* LCD with green light backlight, easy reading.
* Can default auto power off or manual power off.
* Data hold, record max. and min. reading.
* Microcomputer circuit, high accuracy.
* Power by UM3/AA ( 1.5 V ) x 6 batteries or DC 9V adapter.
* RS232/USB PC COMPUTER interface.
* Separate probe, easy for operation of different measurement environment.
* Wide applications: use this anemometer to check air conditioning & heating systems, measure air velocities, wind temperature…etc.

## GENERAL SPECIFICATIONS

| Circuit | Custom one-chip of microprocessor LSI circuit. |
|---|---|
| Display | LCD size : 52 mm x 38 mm LCD with green backlight ( ON/OFF ). |
| Measurement Unit | Air velocity: m/S (meters per second) Km/h ( kilometers per hour ) Ft/min ( FPM, feet per minute ) Knots ( nautical miles per hour ) Mile/h ( mph, miles per hour ) |
| | Air temperature: ℃, ℉ |
| | Type K/ Type J thermometer. ℃, ℉ |
| Datalogger Sampling Time Setting range | Auto — 1 second to 3600 seconds @ Sampling time can set to 1 second, but memory data may loss. |
| | Manual — Push the data logger button once will save data one time. @ Set the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position ( Location ) no. |
| Memory Card | SD memory card. 1 GB to 16 GB. |
| Advanced setting | * Set clock time ( Year/Month/Date, Hour/Minute/ Second ) * Decimal point of SD card setting * Auto power OFF management * Set beep Sound ON/OFF * Set thermometer type to Type K or Type J * Set temperature unit to ℃ or ℉ * Set sampling time * SD memory card Format |
| Data Hold | Freeze the display reading. |

| Temperature Compensation | Automatic temp. compensation ( cold junction compensation ) for the type K/J thermometer. |
|---|---|
| Memory Recall | Maximum & Minimum value. |
| Sampling Time of Display | Approx. 1 second. |
| Data Output | RS 232/USB PC computer interface. * Connect the optional RS232 cable UPCB-02 will get the RS232 plug. * Connect the optional USB cable USB-01 will get the USB plug. |
| Operating Temperature | 0 to 50 ℃. |
| Operating Humidity | Less than 85% R.H. |
| Power Supply | * Alkaline or heavy duty DC 1.5 V battery ( UM3, AA ) x 6 PCs, or equivalent. * DC 9V adapter input. ( AC/DC power adapter is optional ). |
| Power Current | Normal operation ( w/o SD card save data and LCD Backlight is OFF ) : Approx. DC 15 mA. |
| | When SD card save the data and LCD Backlight is OFF ) : Approx. DC 36 mA. |
| Weight | 515 g/ 1.13 LB. |
| Dimension | Main instrument : 203 x 76 x 38 mm Anemometer sensor head : Round, 72 mm Dia. |
| Accessories Included | * Instruction manual..........................1 PC * Anemometer probe.................. 1 PC * Hard carrying case ( CA-06 ).............1 PC |
| Optional Accessories | SD Card Type K thermocouple probe. AC to DC 9V adapter. USB cable, USB-01. RS232 cable, UPCB-02. Data Acquisition software,SW-U801-WIN. |

## ELECTRICAL SPECIFICATIONS (23±5 ℃)

### Air velocity

| Measurement | Range | Resolution | Accuracy |
|---|---|---|---|
| m/S | 0.4 - 30.0 m/s | 0.1 m/S | ± ( 2%+0.2 m/S) |
| Km/h | 1.4 -108.0 km/h | 0.1 Km/h | ± ( 2%+0.8 Km/h) |
| mph ( Mile/h ) | 0.9 - 67.8 mile/h | 0.1 mph | ± ( 2%+0.4 mph) |
| Knots | 0.8 - 58.3 knots | 0.1 Knots | ± ( 2%+0.4 Knots) |
| FPM ( Ft/min ) | 80 - 5916 ft/min | 1 FPM | ± ( 2%+40 FPM) |

### Air temperature

| Measuring Range | 0 ℃ to 50 ℃ /32 ℉ to 122 ℉ |
|---|---|
| Resolution | 0.1 ℃/0.1 ℉ |
| Accuracy | ± 0.8 ℃/1.5 ℉ |

### Type K/J thermometer

| Sensor Type | Resolution | Range | Accuracy |
|---|---|---|---|
| Type K | 0.1 ℃ | -50.0 to 1300.0 ℃ | ± ( 0.4 % + 0.5 ℃ ) |
| | | -50.1 to -100.0 ℃ | ± ( 0.4 % + 1 ℃ ) |
| | 0.1 ℉ | -58.0 to 2372.0 ℉ | ± ( 0.4 % + 1 ℉ ) |
| | | -58.1 to -148.0 ℉ | ± ( 0.4 % + 1.8 ℉ ) |
| Type J | 0.1 ℃ | -50.0 to 1200.0 ℃ | ± ( 0.4 % + 0.5 ℃ ) |
| | | -50.1 to -100.0 ℃ | ± ( 0.4 % + 1 ℃ ) |
| | 0.1 ℉ | -58.0 to 2192.0 ℉ | ± ( 0.4 % + 1 ℉ ) |
| | | -58.1 to -148.0 ℉ | ± ( 0.4 % + 1.8 ℉ ) |

| PATENT | CHINA : ZL 2008 2 0189918.5  ZL 2008 2 0189917.0 Germany : Nr. 20 2008 016 337.4    JAPAN : 3151214 |
|---|---|

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