SD card real time recorder
%RH, Wet bulb, Dew point, Temp., type K/J Temp

PRECISION HYGROMETER

Model : HT-13027SD   *ISO-9001, CE, IEC1010*

DEW point , WET bulb , Type K/J Thermometer
PRECISION HYGROMETER

SD Card Data Recorder

HT-13027SD

LUTRON ELECTRONIC

The Art of Measurement

SD card real time data recorder
%RH, Wet bulb, Dew point, Temp., type K/J Temp.
PRECISION HYGROMETER
Model : HT-13027SD

FEATURES

* Precision hygrometer to measure the Humidity (%RH), Wet bulb Temp., Dew point Temp., Temperature value at the same time and show all the 4 kind reading value in the same LCD.
* Type K, Type J thermocouple thermometer.
* Fast humidity measuring response time.
* Separate probe, easy for operation of different measurement environment.
* 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 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.

GENERAL SPECIFICATIONS

Circuit	Custom one-chip of microprocessor LSI circuit.
DisplayLCD size :	52 mm x 38 mm LCD with green backlight (ON/OFF).
Measurement Unit	Humidity/Temp. : %RH/℃ or ℉. Dew point (Humidity) : ℃ or ℉. Wet bulb (Humidity) : ℃ or ℉. Type K/J thermometer : ℃ or ℉.
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 G to 16 G.
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
Temperature Compensation	Automatic temp. compensation for the humidity function and the type K/J thermometer.
Data Hold	Freeze the display reading.
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. * ADC 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 3.5 mA. When SD card save the data but and LCD Backlight is OFF) : Approx. DC 28 mA. * Af LCD backlight on, the power consumption will increase approx. 12 mA.
Weight	489 g/1.08 LB.
Dimension	177 x 68 x 45 mm (7.0 x 2.7x 1.9 inch)
Accessories Included	* Instruction manual...........................1 PC * Humidity/Temp. probe..................... 1 PC * Soft carrying case (CA-05A)............1 PC
Optional Accessories	SD Card (4 GB) Type K thermocouple probe. AC to DC 9V adapter. USB power to DC 9V converter. USB cable, USB-01. RS232 cable, UPCB-02. Data acquisition software, SW-U801-WIN. Excel data acquisition software, SW-E802. Hard carrying case, CA-06.

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

Humidity/ Temperature

Humidity	Range	5 % to 95 % R.H.
	Resolution	0.01 % R.H.
	Accuracy	± 2 % R . H . @ 10 ℃ to 40 ℃
Temperature	Range	0 ℃ to 50 ℃ ,32 ℉ to 122 ℉.
	Resolution	0.01 degree
	Accuracy @ 5 ℃ to 35 ℃ .	℃ ± 0.5 ℃. ℉ ± 1.0 ℉.

Dew Point (Humidity)

℃	Range	-25.3 ℃ to 48.9 ℃
	Resolution	0.01 ℃
℉	Range	-13.5 ℉ to 120.1 ℉.
	Resolution	0.01 ℉.

Remark :
* Dew Point display value is calculated from the Humidity/Temp. measurement automatically.
* The Dew Point accuracy is sum accuracy value of Humidity & Temperature measurement..

Wet bulb (Humidity)

℃	Range	-21.6 ℃ to 50.0 ℃
	Resolution	0.01 ℃
℉	Range	-6.9 ℉ to 122.0 ℉.
	Resolution	0.01 ℉.

Remark :
* Wet bulb display value is calculated from the Humidity/Temp. measurement automatically.
* The Dew Point accuracy is sum accuracy value of Humidity & Temperature measurement..

Type K/J thermometer

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 ℃	-50.0 to 1300.0 ℃	± (0.2 % + 0.5 ℃)
		-50.1 to -100.0 ℃	± (0.2 % + 1 ℃)
	0.1 ℉	-58.0 to 2372.0 ℉	± (0.2 % + 1 ℉)
		-58.1 to -148.0 ℉	± (0.2 % + 1.8 ℉)
Type J	0.1 ℃	-50.0 to 1200.0 ℃	± (0.2 % + 0.5 ℃)
		-50.1 to -100.0 ℃	± (0.2 % + 1 ℃)
	0.1 ℉	-58.0 to 2192.0 ℉	± (0.2 % + 1 ℉)
		-58.1 to -148.0 ℉	± (0.2 % + 1.8 ℉)

* Appearance and specifications listed in this brochure are subject to change without notice.   240327-HT13027SD