type K/J Temp.

HUMIDITY ONTENT METER

Model : MS-7012SD   *ISO-9001, CE, IEC1010*

61.9

24.6 °C   %RH

☼

⏻   HOLD   REC

FUNCTION

▲   ▼

SET   LOG

TIME   ENTER

SD Card Data Recorder

HUMIDITY CONTENT

Type K/J Thermometer, %RH, DEW point

LT Lutron   **MS-7012SD**

LT Lutron

LUTRON ELECTRONIC   *The Art of Measurement*

+TYPE K/J Temp.
HUMIDITY CONTENT METER
Model : MS-7012SD

FEATURES

* Professional Humidity content probe, used to measure the humidity content value for the materials of Grain, Corn, Rice. Cotton, Paper…
* Stainless probe body, Heavy duty.
* Humidity/Temp., Dew point (Humidity), Wet bulb (Humidity), Type K/J thermometer, 4 kinds measurement are combined into one meter, intelligent and professional.
* Type K, Type J thermocouple thermometer.
* Fast humidity measuring 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.

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	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) * Set sampling time * Auto power OFF management * Set beep Sound ON/OFF * Decimal point of SD card setting * SD memory card Format * Set thermometer type to Type K or Type J * Set temperature unit to ℃ or ℉
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. *.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 3.5 mA.*
		When SD card save the data but and LCD Backlight is OFF) : *Approx. DC 28 mA.*
		.If LCD backlight on, the power consumption will increase approx. 12 mA.
Weight	Meter	345 g/0.76 LB
	Probe	362 g/0.79 LB.
Dimension	Meter	182 x 73 x 47.5 mm (7.1 x 2.9 x 1.9 inch)
	Humidity Content Probe:	Probe length : 600 mm Probe head diameter : 10 mm Cable length : 1.5 meters
Standard Accessories Included		* Instruction manual..........................1 PC * Humidity content probe, MS-71P....................................... 1 Set
Optional Accessories		* Probe sensing head with inner filter, MS71HEAD SD Card (2 GB) * Type K thermocouple probe. * AC to DC 9V adapter. * USB cable, USB-01. * RS232 cable, UPCB-02. * Data Acquisition software,SW-U801-WIN. * Hard carrying case, CA-06

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

Humidity/ Temperature

Humidity	Range	5 % to 95 % R.H.
	Resolution	0.1 % R.H.
	Accuracy	≧70% RH : ± (3% reading + 1% RH). < 70% RH : ± 3% RH.
Temperature	Range	0 ℃ to 50 ℃,32 ℉ to 122 ℉.
	Resolution	0.1 degree
	Accuracy	℃ ± 0.8 ℃. ℉ ± 1.5 ℉.

Dew Point (Humidity)

℃	Range	-25.3 ℃ to 48.9 ℃
	Resolution	0.1 ℃
℉	Range	-13.5 ℉ to 120.1 ℉.
	Resolution	0.1 ℉.

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	0.1 ℃
℉	Range	-6.9 ℉ to 122.0 ℉.
	Resolution	0.1 ℉.

Remark :
* Wet bulb display value is calculated from the Humidity/Temp. measurement automatically.
* The Welt bulb 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 ℃	± (0.4 % + 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 ℉)