

type K/J Temp.

HUMIDITY ONTENT METER

Model : MS-7012SD

ISO-9001, CE, IEC1010



LUTRON

LUTRON ELECTRONIC

The Art of Measurement

+ TYPE K/J Temp.

HUMIDITY CONTENT METER

Model : MS-7012SD

FEATURES

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| * 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 download 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

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|--------------------------|---|
| 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/°C or °F. Dew point (Humidity) : °C or °F. Wet bulb (Humidity) : °C or °F. Type K/J thermometer : °C or °F. |
| Datalogger | Auto 1 second to 3600 seconds @ Sampling time can set to 1 second, but memory data may loss. |
| Sampling Time | 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. |
| Setting range | |
| 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 °C or °F |
| 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 °C. |
| 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). |

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|-------------------------------|---|---|
| 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 °C)

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 °C to 50 °C, 32 °F to 122 °F. |
| | Resolution | 0.1 degree |
| | Accuracy | °C ± 0.8 °C. °F ± 1.5 °F. |

Dew Point (Humidity)

| | | |
|--|------------|-----------------------|
| °C | Range | -25.3 °C to 48.9 °C |
| | Resolution | 0.1 °C |
| °F | Range | -13.5 °F to 120.1 °F. |
| | Resolution | 0.1 °F. |
| 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)

| | | |
|--|------------|----------------------|
| °C | Range | -21.6 °C to 50.0 °C |
| | Resolution | 0.1 °C |
| °F | Range | -6.9 °F to 122.0 °F. |
| | Resolution | 0.1 °F. |
| Remark : * Wet bulb display value is calculated from the Humidity/Temp. measurement automatically. * The Wet bulb accuracy is sum accuracy value of Humidity & Temperature measurement.. | | |

Type K/J thermometer

| Sensor Type | Resolution | Range | Accuracy |
|-------------|------------|--------------------|----------------------|
| Type K | 0.1 °C | -50.0 to 1300.0 °C | ± (0.4 % + 0.5 °C) |
| | | -50.1 to -100.0 °C | ± (0.4 % + 1 °C) |
| | | -58.0 to 2372.0 °F | ± (0.4 % + 1 °F) |
| Type J | 0.1 °F | -58.1 to -148.0 °F | ± (0.4 % + 1.8 °F) |
| | | -50.0 to 1200.0 °C | ± (0.4 % + 0.5 °C) |
| | | -50.1 to -100.0 °C | ± (0.4 % + 1 °C) |
| | 0.1 °F | -58.0 to 2192.0 °F | ± (0.4 % + 1 °F) |
| | | -58.1 to -148.0 °F | ± (0.4 % + 1.8 °F) |
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* Appearance and specifications listed in this brochure are subject to change without notice.

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