

*Humidity, Dew Point, Temp., Type K/J thermometer  
Real Time Data Logger, 16,000 Data, RS232*

# **HUMIDITY METER**

**Model : YK-2005RH**

**ISO-9001, CE, IEC1010**



## **FEATURES**

- \* High capacity, 16,000 data logger no.
- \* Real time data logger ( record year, month, date, hour, minute, second ).
- \* Humidity, Temp., Dew point
- \* Resolution : 0.01 %RH, 0.01 degree.
- \* Max., Min., Data hold, zero adjust.
- \* RS-232 computer interface
- \* DC 1.5V ( UM3, AA ) x 4 PCs or DC 9V adapter in.
- \* Size : 203 x 76 x 38 mm.



**LUTRON ELECTRONIC**

***The Art of Measurement***

# HUMIDITY METER

**Model : YK-2005RH**

## 1. FEATURES

* Humidity, Temperature, Dew point , 3 function measurement are combined into one meter, intelligent and professional.
* Humidity/Temp. function : 0.01 %RH resolution for the humidity reading, 0.01 degree resolution for the Temp. reading.
* Type K, Type J thermocouple thermometer.
* Fast humidity measuring response time.
* Real time data logger, build in clock ( hour-min.-sec., year-month-date ).
* Auto manual data record, 16,000 Data logger no.
* Wide sampling time adjustment range from two seconds to 8 hours 59 minutes 59 seconds.
* RS232 computer interface.
* Can default auto power off or manual power off.
* Multi function with easy operation
* Large LCD with multiple display.
* Data hold, record max. and min. reading.
* Microcomputer circuit provides special function & offer high accuracy.
* Power by UM3 ( 1.5 V ) x 4 batteries or DC 9V adapter.
* RS232 PC serial interface.
* Separate probe, easy for operation of different measurement environment.

## 2-1 General Specifications

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 58 mm x 34 mm.
Measurement Unit	Humidity : %RH ( Relative Humidity ) Temperature : °C or °F. Dew point : °C or °F.
Sampling Time of Data Logger	2 sec to 8 hour 59 min. 59 sec. @ Auto datalogger
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.
Power off	Auto shut off saves 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	DC 1,5 V battery ( UM3 ) x 4 PCs, ( Heavy duty type ). DC 9V adapter input. @ AC/DC power adapter is optional.

Power Current	Approx. DC 21.5 mA @ Main instrument. + Type K/J probe DC 27.5 mA. @ Main instrument. + Humidity probe.
Weight	515 g/ 1.13 LB. @ Battery is included.
Dimension	Main instrument : 203 x 76 x 38 mm Humidity/Temp. probe Round 26 mm Dia. x 160 mm.
Accessories Included	Instruction manual.....1 PC Humidity/Temp. probe.....1 PC Carrying case.....1 PC
Optional Accessories	Type K thermocouple probe. AC to DC 9V adapter. RS232 cable/UPCB-02, USB cable/USB-01 Data Acquisition software, SW-U801-WIN. Data Logger software, SW-DL2005.

## 2-2 Electrical Specifications (23± 5 °C)

Humidity/ Temperature		
Humidity	Range	5 % to 95 % R.H.
	Resolution	0.01 % R.H.
	Accuracy	≥ 70% RH ± (3% reading + 1% RH). < 70% RH - 3% RH. ± 3% RH.
Temperature	Range	0 °C to 50 °C, 32 °F to 122 °F.
	Resolution	0.01 degree
	Accuracy	°C - 0.8 °C. °F - 1.5 °F.

## Dew Point

°C	Range	-25.3 °C to 48.9 °C
	Resolution	0.01 °C
°F	Range	-13.5 °F to 120.1 °F.
	Resolution	0.01 °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..

## Type K/J thermometer

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.0 to 1300.0 °C	± ( 0.2 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.2 % + 1 °C )
	0.1 °F	-58.0 to 2372.0 °F	± ( 0.2 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.2 % + 1.8 °F )
Type J	0.1 °C	-100.0 to 1100.0 °C	± ( 0.2 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.2 % + 1 °C )
	0.1 °F	-58.0 to 2012.0 °F	± ( 0.2 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.2 % + 1.8 °F )