

*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 or 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	Manual	Push the data logger button once will save data one time. @ Set the sampling time to 0 second
	Auto	2 sec to 8 hour 59 min. 59 sec.
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 * main instrument	DC 1,5 V battery (UM3) x 4 PCs, (Heavy duty type).	
	DC 9V adapter input. @ AC/DC power adapter is optional.	

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

Power Supply * clock module	DC 3V silver battery. Type : CR2032.
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 DC 3V silver battery, CR2032..... 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)

0509-YK2005RH