

溫/溼度模組

RHU-500M Humidity and temperature module

Feature

- ◇ Use capacitive type humidity sensor & Temperature sensor in one module
- ◇ Linear voltage output & widely detecting. range: 0-100%RH, 0~+50C.
- ◇ Smaller size, with high stable quality.



Functions:

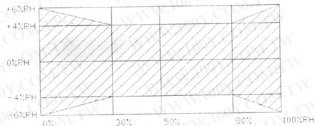
Measuring range	0%RH ~100%RH
Signal output	0.38~3.68V (Linear between 0%RH ~100%RH)
Accuracy	$\leq \pm 4\%RH$ (@ 25°C, 30%RH ~80%RH)
Power consumption	<1.5mA
Input power	5V DC $\pm 2\%$
Operating range	0°C~+50°C
Storage range	0°C~+60°C (without dew point)
Connector	4 pin with pitch 1.5 mm
Detecting time	< 5 Second
Humidity sensor	Capacitive type humidity sensor
Temperature sensor	NTC thermistor (R ₂₅ =50K, 4000)

Typical Humidity output

Input 5 VDC at 25 C

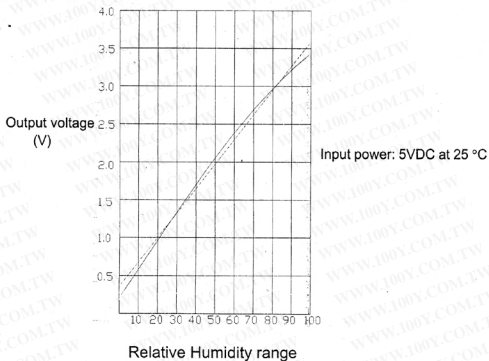
	30%RH	40%RH	50%RH	60%RH	70%RH	80%RH
500M	1.37V	1.70V	2.03V	2.36V	2.69V	3.02V

Humidity accuracy curve



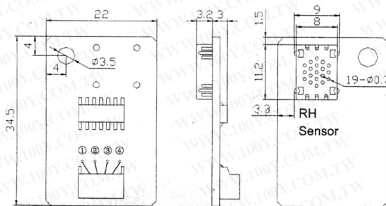
勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Humidity output curve:



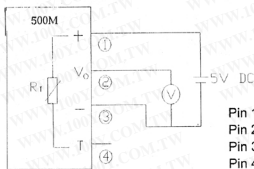
Vs output 0.38V ~3.68V

Module dimension:



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Terminal connecting:



- Pin 1: Input V+
 Pin 2: output Humidity signal
 Pin 3: Input V -
 Pin 4: output Temperature signal

Remark:

1. Do not put the module under the sun light long time.
2. Must turn off the power when user install or change the module in the equipment.
3. If request high accuracy performance, please calibrate the module every 12 months.

Attached:

Temperature output data

Temp			Resistance (K ohm)			Tem			Resistance (K ohm)			Tem			Resistance (K ohm)		
°C	Min.	Typic	Max	°C	Min.	Typic	Max	°C	Min.	Typic	Max	°C	Min.	Typic	Max		
0	159.3	162.8	166.4	20	61.70	62.46	63.22	40	26.17	26.61	27.04						
1	151.5	154.8	158.1	21	59.01	59.71	60.41	41	25.13	25.56	25.99						
2	144.1	147.2	150.3	22	56.45	57.10	57.74	42	24.14	24.55	24.98						
3	137.2	140.0	142.9	23	54.02	54.61	55.21	43	23.19	23.60	24.01						
4	130.6	133.2	135.8	24	51.70	52.25	52.79	44	22.28	22.68	23.09						
5	124.3	126.8	129.2	25	49.50	50.00	50.50	45	21.47	21.81	22.21						
6	118.4	120.7	123.0	26	47.36	47.86	48.36	46	20.58	20.97	21.36						
7	112.8	114.9	117.0	27	45.33	45.82	46.32	47	19.79	20.17	20.55						
8	107.5	109.5	111.4	28	43.39	43.88	44.38	48	19.03	19.40	19.78						
9	102.5	104.3	106.1	29	41.55	42.04	42.53	49	18.30	18.67	19.04						
10	97.75	99.42	101.1	30	39.79	40.28	40.77	50	17.61	17.97	18.33						
11	93.24	94.78	96.34	31	38.12	38.60	39.09	51	16.94	17.29	17.65						
12	88.96	90.39	91.84	32	36.52	37.00	37.49	52	16.30	16.65	17.00						
13	84.90	86.23	87.56	33	35.01	35.48	35.96	53	15.69	16.03	16.38						
14	81.05	82.28	83.51	34	33.56	34.03	34.50	54	15.11	15.44	15.78						
15	77.39	78.53	79.67	35	32.18	32.64	33.11	55	14.55	14.88	15.21						
16	73.92	74.97	76.03	36	30.86	31.32	31.78	56	14.02	14.34	14.66						
17	70.63	71.60	72.58	37	29.61	30.06	30.51	57	13.50	13.82	14.13						
18	67.50	68.39	69.29	38	28.41	28.85	29.30	58	13.01	13.32	13.63						
19	64.52	65.35	66.18	39	27.27	27.70	28.15	59	12.54	12.84	13.15						
								60	12.09	12.38	12.68						

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