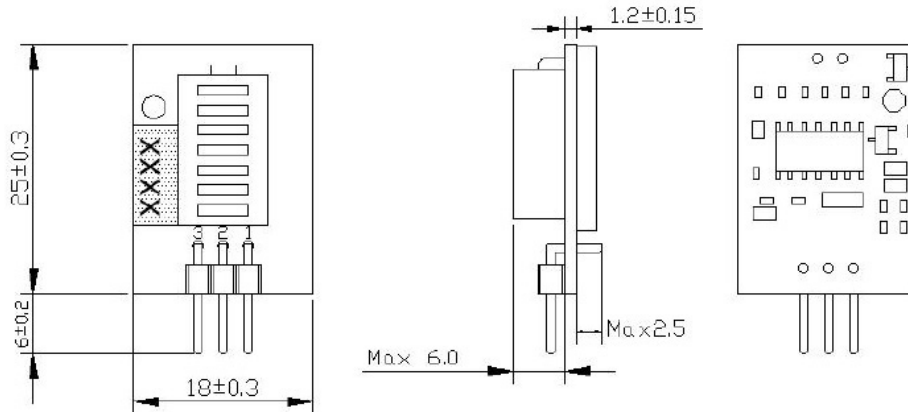


## Humidity sensor module



Terminal Connection :

Terminal	Content.
1	Power Source 5V DC.
2	Humidity Output.
3	GND.

Units :mm

Electrical characteristics :

Sensing element (Humidity) : HMZ-333A1 Humidity sensor " GHITRON HCZ"

Supply Voltage (Vin) : 5VDC±5%

Current Consumption : 5mA max :(2mA avg.)

Operating Range

Temperature : 0 to 60°C

Humidity : 95%RH or less

Storage:

Temperature : -20 to 70°C

Humidity : 95%RH or less

Humidity transmitting

Range : 20 to 90%RH

Accuracy

Humidity : ±5%RH at 25°C , 60%RH , Vin=5.00VDC

Humidity Output 0~3.3V At 25°C, Vin=5.00VDC

Signal(Reference) : (Output Impedance approx:5KΩ)

Humidity(%RH)	20	30	40	50	60	70	80	90
Output Voltage(V)	0.67	1.02	1.36	1.68	1.98	2.26	2.51	2.73

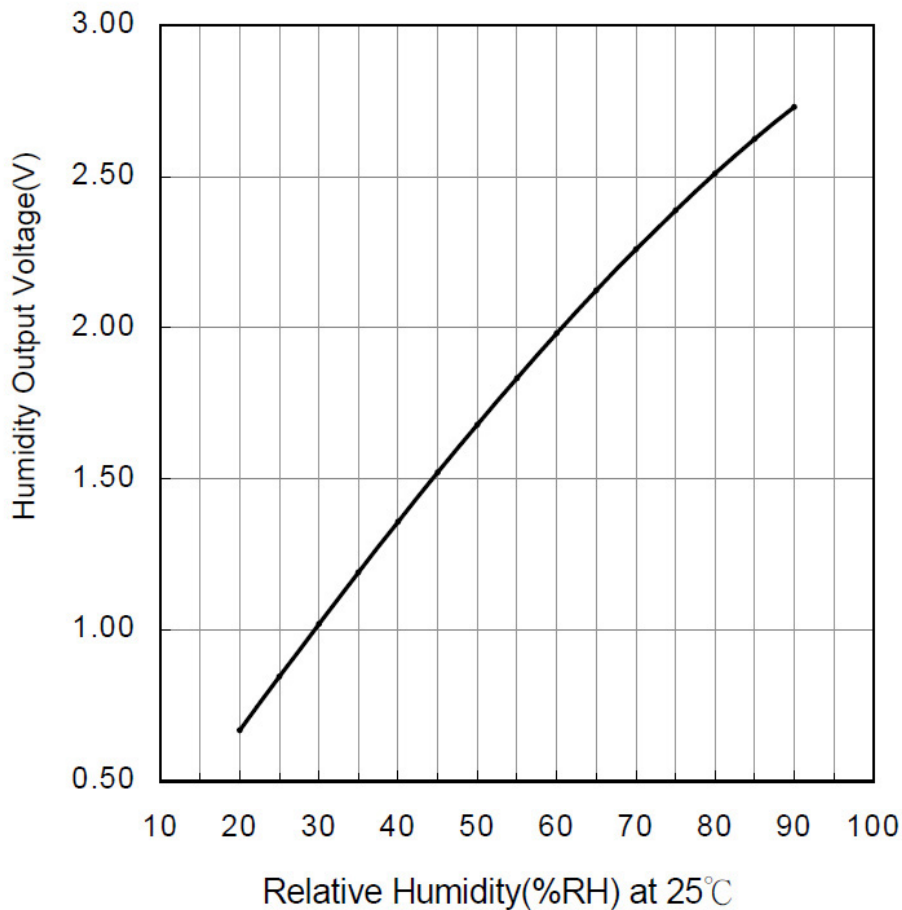
# Datasheet

Item no. 1572447

V1\_07312018\_01\_en

Feature	Application
Wide humidity operation range	Air condition, humidifier, Dehumidifier.
Linear DC Output	Humidity controller, Humidity transmitter.
Easy operation	Hygrometer, Hygro-recorder.
Long-term stability	Copying machine.
Small and economical	Clock, Weather-forecast barometer.

HMZ-333A1 Humidity Output 0~3.3V characteristics



# Datasheet

Item no. 1572447

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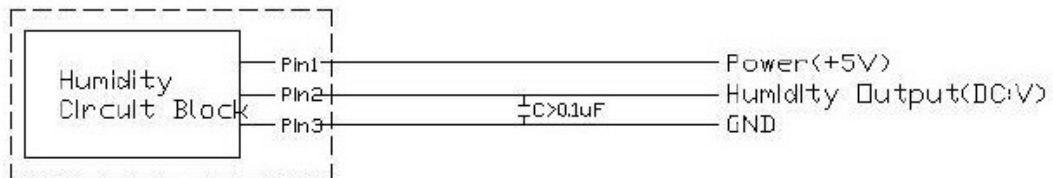
## HMZ module Humidity Output 0~3.3V v.s Temperature characteristics

Temp %RH	10°C	15°C	20°C	25°C	30°C	35°C	40°C
20%RH	0.76	0.73	0.70	0.67	0.63	0.60	0.56
30%RH	1.06	1.03	1.03	1.02	0.99	0.96	0.93
40%RH	1.36	1.34	1.35	1.36	1.34	1.32	1.29
50%RH	1.67	1.66	1.67	1.68	1.67	1.66	1.64
60%RH	1.97	1.97	1.98	1.98	1.98	1.98	1.96
70%RH	2.25	2.25	2.26	2.26	2.26	2.26	2.25
80%RH	2.51	2.51	2.50	2.51	2.50	2.50	2.48
90%RH	2.73	2.72	2.70	2.73	2.70	2.68	2.66

Remark: Accuracy :  $\pm 5\%$ RH at (25°C, 60%RH, Vin=5.00VDC)

Output range : 1.83~2.12 V

### Pin2 Humidity output (DC:V)



Input Voltage	5V
Humidity Output Voltage	0~3.3V
Terminal Connector	2211R-03G-LP (3 pins, Pitch = 2.54mm).
Accuracy	$\pm 5\%$ RH
Output Range	20%RH~90%RH

# Datasheet

Item no. 1572447

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**Reliability test :**

No.	ITEM	METHOD	REQUIREMENT
6.1	Impact test	To drop Module 3time at random on to a hard wooden plate from 1meter above high.	No breakage, nor cracks. Should be electrically normal · $\Delta\%RH < \pm 5\%RH$
6.2	Vibration test	Vibration test in X-Y-Z axis for 30min.under 10-55Hz frequency, 1.5mm(10-55-10Hz) amplitude.	No breakage, nor cracks. Should be electrically normal · $\Delta\%RH < \pm 5\%RH$
6.3	Heat resistance	1000 hours@ 70°C	$\Delta\%RH < \pm 5\%RH$
6.4	Cool resistance	1000 hours@ -30°C	$\Delta\%RH < \pm 5\%RH$
6.5	Humidity resistance	1000 hours@ 60°C/ 90%RH.	$\Delta\%RH < \pm 5\%RH$
6-6	Temperature cycle test	Repeat 100 cycles · Each cycle: 30 minutes@-30°C/30 minutes@85°C	$\Delta\%RH < \pm 5\%RH$
6.7	Loading test	Room Temperature / Humidity · Input +5V. for 1000hours.	$\Delta\%RH < \pm 5\%RH$

**Remarks :**

- (1) All standard figures are based on humidity variation under 60%RH(25°C)
- (2) Upon completion of all tests. The module will be left over under nominal environment and humidity for 24hours.