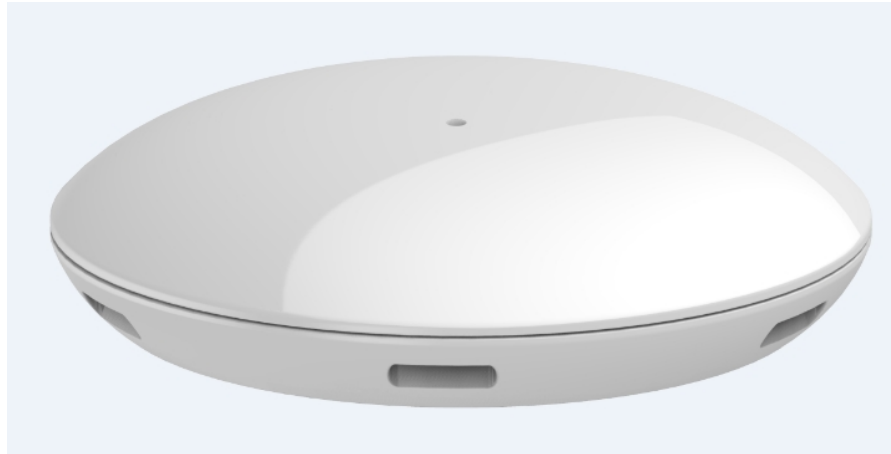



Weather Sensor SPEC / SA7101



Feature

- **Bluetooth Wireless temperature, humidity, pressure Sensor**
- High precision non-contact temperature measurement ($\pm 0,5^{\circ}\text{C}$)
- Temperature ranges:
-20°C to +85°C for ambient temperature
- Use Bluetooth Low Energy and have low power consumption technology
- Easily manipulate using.
- Free APP Download: APP is free download from apple store or google play.
- Device Max distance 30M in open spaces, due to the external environment are subject to change.
- Low battery alarm  : when the battery charge is remained to 28% will show the low battery alarm you.

Specification

Bluetooth	Bluetooth 4.0
Consumption	0.28mA
Humidity Sensor	0 to 99% RH operating range $\pm 3-4.5\%$ RH (@ 0~80% RH) _{*2} $\pm 5.5-7\%$ RH (@80~99% RH)
Temperature Sensor	-20 to +85 °C operating range $\pm 0.5-1\text{ }^{\circ}\text{C}$ (@0~70 °C) $\pm 1.25\text{ }^{\circ}\text{C}$ (@70~85 °C) $\pm 2.5\text{ }^{\circ}\text{C}$ (@0~-20 °C)
Pressure Sensor	260 to 1260 mbar absolute pressure range
	High-resolution mode: 0.020 mbar RMS
Consumption	Low power consumption: Low resolution mode: 5.5 μA High resolution mode: 30 μA
Dimension	Approx.80x22mm (W x H)
Weight	Approx.30g
Working Voltage	Two AAA batteries _{*1}
Operation Time	Standby for six months above
Device connect	Blue LED permanent bright
Operating range	30 M
others	Per second broadcast once. 2 minutes device transmits the information to the mobile phone. 8sets weather station can be installed at the same time

***1: If the temperature is below 10°C or 50F, suggest using rechargeable batteries to replace disposable batteries.**

***2: Recommended humidity operating range is 20–80%, RH(non-condensing) over -10 to +60 °C. Prolonged operation beyond these ranges may result in a shift of sensor reading with slow recovery time.**

System Requirement

iOS -iphone4s or above

-ipad3 or above

-ipad mini or above

-ipod touch5 or above

Android - Support Android 4.3 or above

iOS-Support iOS 7 or above

Bluetooth Smart Ready product

Website : <http://www.bluetooth.com/Pages/Bluetooth-Smart-Devices-List.aspx>



Manufacturer	Product Name	Type of Product
Apple	iPad (Air, Mini, 3 rd & 4 th gen)	Tablet
Apple	iPhone (5s, 5c, 5 & 4s)	Phone
Apple	iPod touch 5th	Portable Media Player
Google	Nexus 5, Nexus 4	Phone
Google	Nexus 7, Nexus 10	Tablet
HTC	One, One Max	Phone
Motorola	Droid RAZR, Ultra, Maxx, Mini	Phone
Motorola	Moto G, X	Phone
Samsung	Galaxy Series	Phone
Sony	Xperia Series	Phone
Sony	Xperia Series	Tablet

Accessories (Package Contents)

- Quick Installation Guide
- Two AAA batteries

Connection chart



When you install batteries ready, weather sensor will be broadcast automatically.

Test report

1. Specification

1.1 SA-7101 Spec

Item	Spec Item	Spec Value
Electrical	Radio Carrier Frequency	2.4G
	Operating Distance	30M in Open spaces
	Battery Requirement	AAA batteries x2pcs
	Operation Voltage	3V
	Power consumption	0.186mA

2. Environmental Requirement

Test Equipment	
Equipment :	Temperature Test Chamber
Manufacturer :	KSON
Model Number :	THS-C2T-100
Date of Calibration :	Jul. 8, 2013

Laboratory Ambiance Condition	
Temperature :	15 ~ 35 °C
Humidity :	25 ~ 75 %RH

2.1 Temperature & Humidity Test:

Chamber settings	Test Device
0 °C	
the data cannot refer when the temperature was below to 0 °C	
0 °C	1.8 °C 32%
-5 °C	-4 °C 36%
-10 °C	-8.9 °C 30%
-15 °C	-13.7 °C 42%
-20 °C	-18.7 °C 49%
20 °C	
20%	20 °C 23%
30%	20 °C 30%



TEL: +886 2 86984245 FAX: +886 2 86984108

Add: 15F, No.81,Sec.1, Hsin Tai Wu Rd.,Hsi-Chih 221, Taipei Hsien, Taiwan

40%	19.8 °C 41%
50%	19.8 °C 49%
60%	19 °C 57%
70%	20 °C 66%
80%	20 °C 76%
25 °C	
20%	25 °C 23%
30%	25 °C 31%
40%	24 °C 41%
50%	24 °C 49%
60%	24 °C 56%
70%	24 °C 66.5%
80%	24.8 °C 76%
30 °C	
20%	29.9 °C 24%
30%	29 °C 32%
40%	29 °C 41%
50%	29 °C 56%
60%	29 °C 57%
70%	29.7 °C 65.5%
80%	29.8 °C 77%
35 °C	
20%	34.9 °C 26%
30%	34.93 °C 3%
40%	34 °C 41%
50%	34.9 °C 49%
60%	35 °C 57%
70%	35.1 °C 70%
80%	35 °C 76%
40 °C	
20%	39 °C 26%
30%	40 °C 31%
40%	39.8 °C 38%
50%	39.9 °C 49%
60%	40 °C 58%
70%	40 °C 66%

TEL: +886 2 86984245 FAX: +886 2 86984108

Add: 15F, No.81,Sec.1, Hsin Tai Wu Rd.,Hsi-Chih 221, Taipei Hsien, Taiwan

80%	40 °C 76%
45 °C	
20%	44 °C 24%
30%	45 °C 31%
40%	45 °C 40%
50%	45 °C 49%
60%	45.4 °C 57%
70%	45 °C 65.5%
80%	45.2 °C 76.5%

Setup Photo:



Connection Chart

● BLE Temperature/Humidity/Pressure Sensor SPEC



Feature

- Bluetooth Wireless Temperature/Humidity/Pressure Sensor
- High precision non-contact temperature measurement (+/- 0,5°C)
- Temperature/Pressure ranges:
-20°C to +85°C for ambient temperature
- low power consumption technology: Use Bluetooth Low Energy
- Easily manipulate using.
- Free APP Download: APP is free download from apple store.
- Device Max distance 30M in open spaces, due to the external environment are subject to change.

Specification

Bluetooth	Bluetooth 4.0
consumption	0.35mA
Humidity Sensor	± 4.5 % RH (maximum @ 20–80% RH)
Temperature Sensor	±0.5 °C accuracy (typical)
	±1 °C accuracy (maximum @ 0 to 70 °C)
	0 to 100% RH operating range
	–20 to +85 °C operating range
Pressure Sensor	260 to 1260 mbar absolute pressure range
	High-resolution mode: 0.020 mbar RMS

Connection Chart

	Low power consumption: Low resolution mode: 5.5 μ A High resolution mode: 30 μ A
	-20 to +85 $^{\circ}$ C operating range
Dimension	Approx.80x22mm (W x H)
Weight	Approx.33g
Working Voltage	Two AAA batteries
Operation Time	Standby for five months above
Support Device	Apple: Iphone4s or above Ipad3 or above Ipad mini or above Ipod touch5 or above
Device connect	LED => Blue light flashes
Operating range	30 M

Accessories (Package Contents):

- Quick Installation Guide



Connection Chart



Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 0.5 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 0.5 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.