

LinkHigh Temperature & Humidity Sensor Product Specifications



Product Description



Dimension
Depending

1 Product Overview

- Low cost Zigbee HA compliant solution: Green Power protocol
- Periodic zone status reporting
- Periodic battery status and low battery reporting
- Small form factor
- Single coin cell operation. (CR2032)
- 2 year battery life.(25°C operating temp range)

Specifications:

Hardware	~ IEEE 802.15.4 compliant
	~ Frequency Range :2405 ~ 2475 MHz
	~ Antenna type: internal Antenna
	~ Main Core: XAP5 ,high performance 16/32-bit processor
	~ operating Voltage:3.0[V](2.4~ 3.6V,Coin Cell Battery CR2032 1ea)
	~ operating current : <2uA
	~ operating Temperature : -10 ~ 50 [°C]
	~ Pairing Button : 1ea
	~ Indicator LED : 1ea (Green LED)
Software	~ Zigbee Green Power compliant solution
RF Capabilities	~ Receiver Sensitivity : -100[dBm]/typ
	~ Transmitter Output Power: 20 [dBm]

2 Hardware / Firmware

2.1 Feature List

2.1.1 Zigbee

Features	Specification
Standard	IEEE 802.15.4/ Green Power protocol
Operating Frequency	2405 ~ 2475 MHz
Main Processor	GP490
Modulation	OQPSK
Antenna	Internal Metal antenna
Transmitted Power	20 [dBm]
Receive Sensitivity	-100 [dBm]

2.1.2 DC Voltage Requirement

Features	Specification
Battery	CR2032
DC Voltage	3.0VDC Nom., 2.4VDC Min.
Battery Life	≥ 2 year

2.1.3 Detection Range and accuracy

Temperature Range	-40 to +125 °C operating range, ±0.4 °C at -10 to 85 °C , 0.01 degree of accuracy
Humidity Range	0 to 100% RH operating range, ± 4% RH (max),at 0-80% RH

2.1.4 Controls and Indicators

Features	Specification
Pairing LED	Green
Push Button	Pairing Button



2.2 Operation flow

~ If the sensor application is commissioned before. Commissioning will be restored automatically,

~otherwise : Powering up or Press the Pair button to start commissioning, and the Green LED will be blink with 1s period

~ To start decommissioning, press and hold the Pair button for 3s, and decommissioning will be started and the Green LED will be on for 2s

~ If the sensor is commissioned :

On every 15 minutes, the sensor status will be reported the temperature and humidity to the target regularly

On every 6 hours, battery report will be sent to the target

When the battery voltage is low than 2.5V , the sensor send the low battery status to the gateway.

When the pair-switch is press once, the sensor will send the battery voltage, temperature data, humidity data to the gateway.

FCC Compliance Statement

NOTE: 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 or more 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.

Changes or Modifications not expressly approved by the party responsible could void the user's authority to operate this device.

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.