



Ext. Temp Tag (Gen2) User Guide

Introduction

The Temp Tag described in this user guide is using a Thread device , it has been tested to work with Thread Mesh network. This device can be controlled by NFC NDEF messages. This device can support the external Probe. It is with a 6 pin connector for the most of I²C sensors.

In the picture below we can see the Temp Tag with LED. The NFC Coil Antenna is around the LED cover.



Out of the box

The Temp Tag comes in a deep sleep state to extend battery life, at this point it can only be triggered by NFC reader. This device should join a network to be able to interact with other ones via Thread commands.

User interface

The Temp Tag has one LED for display; the device can execute different actions depending on the NDEF messages. The following table shows the according actions:

NFC NDEF message	LED indicator	Action
activate	Fast blink 10 times	Network steering / finding
hibernate	Keep on about 2s	Set the device into deep sleep mode
reset	Keep on about 2s	Reset the device



Working Parameter

Parameter	Value
Work Frequency	Thread 2.4GHz and NFC 13.56MHz
TX Power	Max 8dBm
Battery	ER14250, 3.6V, 1200mAH
Measuring range	TMP117 on board: -40℃~85℃, $\pm 0.1^{\circ}\text{C}$ (-20℃~55℃) ;
	SHTC3: -40℃~85℃, $\pm 0.2^{\circ}\text{C}$ (-20℃~55℃) ;
	SHTC3: 0~100%RH, $\pm 2\%$ (20%RH~80%RH) ;
Battery Life	5 years
Operating Temperature	-40℃~85℃
Storage Environment	-40℃~85℃, No condensation
Size	88mm*45mm*19mm

FCC Warnings

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

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.

NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

RF Exposure Statement



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To maintain compliance with FCC's RF Exposure guidelines, this equipment should be installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

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