

## Instruction of NFC-2432

NFC-2432 is one of 2.45GHz RFID series that we independently developed. With contactless, free from environment impact, long reading distance, excellent anti-collision etc., NFC-2432 tag is applied to various field. Currently, NFC-2432 has widely applied to logistics and warehouse intelligent management, transportation intelligent management, school management, luggage parcel management, docks container management ant personnel positioning system, patrol management and asset management etc.

### 1. Overview

NFC-2432 is 2.4 GHz RFID tag with integrity structure and full-function. It includes RFID transceiver, microprocessor, kinds of sensors and button battery etc.

NFC-2432 supports multiple functions can be customized by customer's demands, such as read/write, temperature, sensor, vibration, dual frequency etc.



Figure 1: NFC-2432 Active tag

### 2. Function Introduction

- I NFC-2432 adopts NFC company protocol for development, meanwhile, it also compatible with the communication protocol of other suppliers;
- I Long communication distance and high receiving sensitivity.
- I Excellent anti-collision performance, up to 500 tags read simultaneously;
- I Read and Write function: Real time read and write operation can be customized;
- I Support 4K bytes user memory;
- I Temperature sensor tag: Intelligent temperature detection (detecting precision  $\pm 0.5^{\circ}\text{C}$ );
- I Vibration sensor: Detect vibration status in real time;
- I At 500ms transmitting interval, the life time of read only tag is 4~5 years; the lift time of read and write type is about 2 years;
- I IP68 environmental classification;
- I Battery alarm function: Alarm when low battery;
- I Communication rate can be adjusted according to customer's demands, such as 250Kbps, 1Mbps, 2Mbps;
- I Multiple functions can be customized, such as read and write, temperature, sensor, vibration;
- I With superior durability, can be used in various environments.

### 3. Technology Parameter

Table 1: NFC-2432 technology parameter

| NFC-2432 technology parameter |   |
|-------------------------------|---|
| Technology parameter          | Specifications  |
| <b>RF module</b>              |   |
| Operating frequency           | 2.401GHz~2.481GHz ISM   |
| Modulation                    | GFSK  |
| <b>Optional function</b>      |   |
| Read and write                | 4K byte user memory   |
| Temperature                   | Intelligent temperature detection, detecting precision $\pm 0.5^{\circ}\text{C}$                                |
| Vibration                     | Detecting vibration status in real time   |
| <b>Physical parameter</b>     |   |
| Working                       | $-20^{\circ}\text{C}\sim +60^{\circ}\text{C}$ 90%RH   |
| Life time                     | Read and write: 2 years(at 500ms transmitting interval)<br>Read only: 4~5 years(at 500ms transmitting interval) |
| Battery                       | Alarm when low battery  |
| Material                      | ABS(ROHS), flame retardant  |
| Color                         | White, blue, green, yellow  |
| Environmental classification  | IP68  |
| Drop testing                  | 1.2m  |
| Weight                        | 30g   |
| Dimension                     | 87mm*56mm*5mm   |

### 4. Appearance

NFC-2432 is in rectangle and card shape, and it has different colors as white, blue, green and yellow. The surface of active tag has scrub and attached with ID number.



Figure 2: Front

## 5. Caution

- I When using active tag, do avoid to be used in metal or liquid.

## 6. Typical application

- I Cold chain logistic
- I Temperature monitoring and collecting
- I School students' management
- I Vehicle and asset tracking

## 7. After-sale service

We have one year guarantee and any repair is free of charge within this guarantee time (Based on products model No. and manufacture date). However, the damage in the event of mechanical impact, over-high voltage, improper operating, dismantling the reader personally etc. shall be excluded from the guarantee.

Welcome your feedback to us while using the products, we would be dedicated to serve you. If you have any query, please free to contact sales representatives.

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### FCC STATEMENT

1.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.

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

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.