

Instruction of NFC-4332

NFC-4332 is one of 433MHz RFID series that we independently developed. With contactless, free from environment impact, long reading distance, excellent anti-collision etc., NFC-4332 tag is applied to various field. Currently, NFC-4332 has widely applied to logistics and warehouse intelligent management, transportation intelligent management, school management, luggage parcel management, docks container management and personnel positioning system, patrol management and asset management etc.

1. Overview

NFC-4332 is 433MHz RFID tag with integrity structure and full-function. It includes RFID transceiver, microprocessor, kinds of sensors and button battery etc.

NFC-4332 supports multiple functions can be customized by customer's demands, such as read/write, temperature, sensor, vibration, dual frequency etc.



Figure 1: NFC-4332 Active tag

2. Function Introduction

- | NFC-4332 adopts NFC company protocol for development, meanwhile, it also compatible with the communication protocol of other suppliers;
- | Long communication distance and high receiving sensitivity.
- | Excellent anti-collision performance, up to 500 tags read simultaneously;
- | Read and Write function: Real time read and write operation can be customized;
- | Support 4K bytes user memory;
- | Temperature sensor tag: Intelligent temperature detection (detecting precision ± 0.5)°C;
- | Support ISO15693/ISO14443A protocol;
- | Vibration sensor: Detect vibration sense in real time;
- | At 500ms transmitting interval, the life time of read only tag is 5 years; the lift time of read and write type is about 3 years;
- | IP68 environmental classification;
- | Transmitting power is less than 2mw, which is suitable for human carry and environment friendly;
- | Battery alarm function: Alarm when low battery;
- | Communication rate can be adjusted according to customer's demands. (0~500Kbps can be customized)
- | Multiple functions can be customized, such as read and write, temperature, sensor, vibration, dual frequency;

- || Data encryption: Provide three kinds of encryption method, including AES encryption, link layer encryption and random number encrypted;
- || With superior durability, can be used in various environments.

3. Technology Parameter

Table 1: NFC-4332 technology parameter

NFC-4332 technology parameter	
Technology parameter	Specifications
RF module	
Operating frequency	433.050MHz~434.790MHz
RF Power	-30.0dBm~10.0dBm
Reading distance	0~100m (with standard matched 2dBi PCB antenna)
Operating Current	<22uA, 3V (500ms transmitting interval)
Modulation	ASK
Communication rate	0~500Kbps
Optional function	
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
Dual frequency	support ISO15693/ISO14443A protocol
Physical parameter	
Working temperature	-20°C~+60°C
Life time	Read and write: 3 years(at 500ms transmitting interval) Read only: 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-4332 is in rectangle and card shape, and it has different color as white, blue, green and yellow. The surface of active tag has scrub and attached with ID number.



Figure 2: Front

5. Caution

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

6. Typical application

- | Cold chain logistic
- | Temperature monitoring and collecting
- | School students' management
- | 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