

# **VC-SF-T8006 Specification**

**Release History**

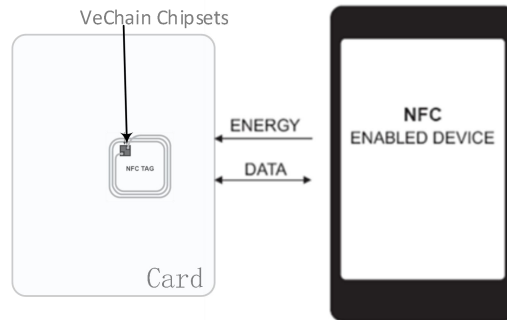
Version	Change history	Date
V1.1	Initial Release	18/09, 2019

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# General Description

VC-SF-T8006 Series is a passive NFC tag product, which is compliant with the ISO/IEC14443A /NFC Forum Standard. It can communicate with NFC device (e.g. mobile phone) contactless to transfer data as below picture shows.



a. Contactless System



b. Product Pic



c. Packing

The tag is pre-programmed with VeChain IDs and cryptographic keys, which can be used in VeChain Blockchain solutions, such as anti-counterfeiting, traceability and inventory in logistics supply chain management and consumer engagement.

The product dimension is  $\phi 13\text{mm}(\pm 0.5\text{mm}) \times 2\text{mm}$ , the compact size fits for most scenarios, with good RF performance. In addition, we can also provide size, hole or color customized service according to your goods. The product can be packaged by plastic bag, packing volume number is 100 pcs/bag, please refer figure C.

## Product Features

- Substrate Material: PPS plastic
- Surface Material: PPS plastic
- Memory capacity: 144bytes
- Characteristics: Soak resistance, waterproof, sunblock, High temperature resistant
- Washing times: 100 times
- Operating Frequency: 13.56Mhz
- Protocol: ISO/IEC14443-A /NFC NDEF
- Read and write range: 0~30mm (Determinate by reader and use environment)
- Programming Cycle: 1,000,000 cycles
- Color: Black/White
- Weight: 1.50 ( $\pm 0.1$ ) g
- Dimension:  $\phi 13 \times 2\text{mm}$
- Temperature resisting: 180°C
- Specific: Safe, non-toxic and environmentally friendly

## Environment Parameter

- Data Retention: above 10 years
- Operating Temperature: -25°C~180°C
- Storage Temperature: -25°C~90°C

## Key Application

- Goods and device authentication
- Product information
- Loyalty (vouchers, coupons)
- Logistic management

It can be used in the production management, anti-counterfeiting and logistics management of laundry, advanced clothing, school uniforms, special clothing. It can not only be washed and soaked, but also be repeatedly rub and directly ironed. It can be normally used in many poor conditions. Besides, it can be used in situations such as production track, warehouse inventory, automobile engine maintenance identification, and chemical raw material management.

## Applicable Documents

- |                   |   |
|-------------------|---|
| [ISO/IEC 14443-2] | <ul style="list-style-type: none"><li>• ISO/IEC 14443-2 Type A Identification Cards- Contactless Integrated circuit(s) cards- Proximity Cards- Part 2: Radio frequency power and signal interface</li></ul> |
| [ISO/IEC 14443-3] | <ul style="list-style-type: none"><li>• ISO/IEC14443-3 Type A Identification Cards- Contactless Integrated circuit(s) cards- Proximity Cards- Part 3: Initialization and Anti-collision</li></ul>           |
| [NDEF]            | <ul style="list-style-type: none"><li>• “NFC Data Exchange Format (NDEF)”, NFC Forum™, Technical Specification, May 2006.</li></ul>   |

## Ordering information

Part number	Antenna Description	Product Description	Package Description
VC-SF-T8006-020	copper	Dimension $\phi$ 13mm*2mm /color black/ Nonporous Chip IC: - NXP (NFC)	By piece and packaged by plastic bag
VC-SF-T8006-040	copper	Dimension $\phi$ 23.5mm*2mm /color black/ Nonporous Chip IC: - NXP (NFC)	By piece and packaged by plastic bag

## Legal Information



## Contact information



For more information, please visit: <https://www.vechain.com>

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