

VC-VS-I8001 Specification

Release History

Version	Change history	Date
V1.1	Model upgrade:VC-VS-I8001-02C	17/09,2019
V1.2	Model upgrade:VC-VS-I8001-02C	28/02,2020

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General Description

VC-VS-I8001 is a compact designed device for temperature monitoring and logging. With its embedded NFC interface, internal temperature sensor and direct battery connection, it can be easily used in temperature monitoring case such as cold chain logistics.

VC-VS-I8001, 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 bellow picture shows. *



* VC-VS-I8001 need work with VeChain APP with encryption algorithm. More details, please contact VeChain technical window: tech@vechain.com

Product Features



Surface Material	PC+ABS
DEVICE Dimensions	55*41*9 mm
Logo Dimensions*(can be customized, need contact VeChain)	52*38*0.3(R1.5)mm
Measurement accuracy	Temperature sensor with ± 0.3 °C absolute temperature accuracy between 0 °C and 20 °C and ± 0.5 °C in the range between -20°C and +40 °C

Operating Frequency	13.0MHZ ~ 14.5MHZ
Protocol	NFC/RFID ISO 14443 type A interface
Read and write range	0.5CM-3.0CM (determinate by reader)
Memory	32 KB FLASH 4 KB EEPROM
Temperature resolution	0.1 °C
Life Cycle*(with NEW CR2032)	>6 months up to 140000 log points
Color	White* (other colors requirements need contact VeChain)
Weight	25g(TBC)
Battery	CR2032
Battery life	Above 5 years (15-minute working interval)

Competitive Advantage

1. Temperature warning and tracking
2. Temperature recording and storing
3. Encrypted transmission of temperature data
4. Device identity verification
5. Compressed storage and transmission of temperature data
6. Mass memory, which can store more than 140,000 temperature records
7. The minimum collection interval can be set to 1 second
8. High measurement accuracy, ± 0.3 °C accuracy between 0 °C ~20 °C and ± 0.5 °C accuracy between -20°C ~ 40 °C

9. High temperature resolution, which is 0.1°C
10. Long battery life, which can reach to above 5 years with 15 minutes working interval
11. High data transmission speed

Applicable Documents

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

Ordering information

Part number	Description	Package description
VC-VS-I8001-02C	55*41*9 mm; white	By piece and packaged by plastic bag.

Legal Information



Contact information



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

For sales office addresses, please send an email to: bd@vechain.com