RFID READER

HF Bluetooth Reader

User Manual

Version 1.0

Aug 2019

StrongLink

catalogue

1. Introduction

SL804H is a wristband watch-type HF reader,onforming to ISO14443A/B, ISO15693 and other protocols, the operating frequency is 13.56MHz, and it can communicate with Bluetooth enabled devices such as mobile phones, tablets. It's quite stable and simple operation if we run "Easy RFID" APP from Bluetooth enabled devices.

2. Appearance

The appearance of Bluetooth reader is showed above. It supported to the Android Bluetooth 4.0, IOS IPhone 4S and later mobile cell phones.

3. Function

This product is connected to a terminal device such as a mobile phone through Bluetooth air interface to perform NFC/HF contactless IC card reading or writing operation on a mobile phone. The device is small, stable and flexible, can be used in personal and business management to identify such as campus cards, bus cards, bank cards, and small wallet payment cards.

Communication interface is mobile Bluetooth, support for contactless 14443A / B, CPU card and M1 card, Desfire card and other IC card for read or write; support Android and IOS both systems, with built-in rechargeable lithium battery, Demo software and customer software development is supported.

4. Specification

This product has good read card and bluetooth communication compatibility. It has good compatibility with mainstream mobile phones in the market and its compatibility is up to 95%. It also has good compatibility with mainstream IC card vendors and all IC cards involved in public transport projects, with 98% compatibility.

5. Contactless Card Operation

（1） Support reading and writing of non-contact 14443A/B, CPU card and M1 card, Desfire card, Felica etc

（2） Good reading and writing performance for standard cards and special-shaped cards. The reading distance can reach 3-5cm

（3） Q-Factor Value 30±2%

（4） Card reading speed can meet the needs of the bus card payment system. Complete 1k bytes of data read or write within 1 second.

（5） No missing data or error at a time for 1k bytes transaction

（6） Operating Frequency: 13.56MHz

（7） Magnetic field strength on reading(Hmax) ≤ 7.5A/m rms

（8） Magnetic field strength on reading(Hmin) ≥ 1.5A/m rms

（9） Baud Rate supported: 106kbps、212kbps、424kpbs

6. Bluetooth Communication

Bluetooth/BLE 4.0 above protocol.

（1） Be able to communicate with 4.0 or more BLE Bluetooth Android mobile devices. It can communicate with Bluetooth BLE4.0 and above IOS devices
（2） Card reading speed can meet the needs of the bus card payment system. Complete 1k bytes of data transaction within 1 second.
（3） Communication Distance in air-free 5m
（4） No missing data or error at a time for 1k bytes transaction
（**5**） BLE connection is less than 1 second (scan + connection).

7. Device Query and Display

Through the LED indicator light and software display, the following states of the device will be clearly noticed:

（1） Standby mode: LED light is silent, green light flashed means disconnected, green light keeps on while connected
（2） When the charge is not completed, the red light is on and the red light is off when charging is finished
（3） The blue light flashes when a card was found or device is exchanging data between reader and card, and the green light is on when the card is activated.
（4） The light slow flashing, flashing frequency is about 1s, Software version is uploading via the SDK interface.

8. Charging and Power Consumption

Ultra-low power & Automatic Sleep-mode

Battery Capacity: 65mAh

Recharge interface: MICRO-USB/5V-500mA

Charing Time: 70minutes

Standby Time: 30days

Continuous Working Time: 7hours (reading nearby 20,000times)

9. Reliability

Card Reading and blue-tooth communication are stable. There is a software dog monitored any unforeseen issue such as crash, abnormalities occurs over the device system in case of abnormal it will cause system restarted and fixed itself.

10. Fall Down Test / waterproof

1.2 meters fall down test won’t be damaged. Water splashes in any direction have no harmful effects.

11. Battery Recharge

Required DC 5V, Support charging from power adapter, cellphone charger or power bank.

12. Environmental Requirements

Charge voltage 5V±5%

Working temperature -20℃~55℃

Storage temperature -40℃~85℃

Relative humidity < 90%

Storage and transportation relative humidity 20%～93%

Atmospheric pressure 60kPa～110kPa