# RFR 811

## 13.56MHz NFC Reader

## Introduction

Near Field Communication (NFC) is a popular technology in recent years, and is becoming a set of standards for smart phones and similar devices to establish radio with each other by touching them together or bringing them into close proximity, usually no more than a few centimeters.

The RFR811 is a host-linked contactless card reader developed based on 13.56 MHz Contactless Technology. Compliant with the ISO/IEC18092 standard for Near Field Communication (NFC), it supports MIFARE®, ISO 14443 A and B, ISO15693, ISO 18092 Tag and FeliCa cards.

The RFR811 is ideal for both secure personal identity verification and online micro-payment transactions. Other applications include access control, e-payment, e-ticketing for events and mass transit, toll toad fare collection and network authentication.

The RFR811 comes with an optional holder with it could mount the reader either on desk or wall, so that users can tap contactless cards on NFC-enabled devices onto the RFR811 with ease.

## Features

- Card Reader
  - Read/write speed up to 424 kbps
  - Built-in antenna for contactless tag access, with card reading distance of up to 50 mm (depending on tag type)
  - Supports Near Field Communication (NFC) ISO 18092 Tag
  - Completely integrated protocol handling for ISO 15693, ISO 14443A/B, MIFARE and FeliCa.
  - Built-in anti-collision feature (only 1 tag is accessed at any time)
- Operation Voltage 5 Vdc

- NFC Support:
  - Can read all card UID, MIFARE (APDU command) read/write or ISO15693 read/write (APDU Command) in different models
- RS232 or USB Interface support
- Peripherals
  - 2 color LED
  - buzzer
- An optional holder with it could mount the reader either on desk or wall

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## Applications

- Mobile Devices (Tablets, Handsets)
- Secure Pairing (Bluetooth, WiFi, Other Paired Wireless Networks)
- Public Transport or Event Ticketing
- Passport or Payment (POS) Reader Systems
- Product Identification or Authentication
- Medical Equipment or Consumables
- Access Control, Digital Door Locks
- Sharing of Electronic Business Cards

90    17    90

Unit: mm
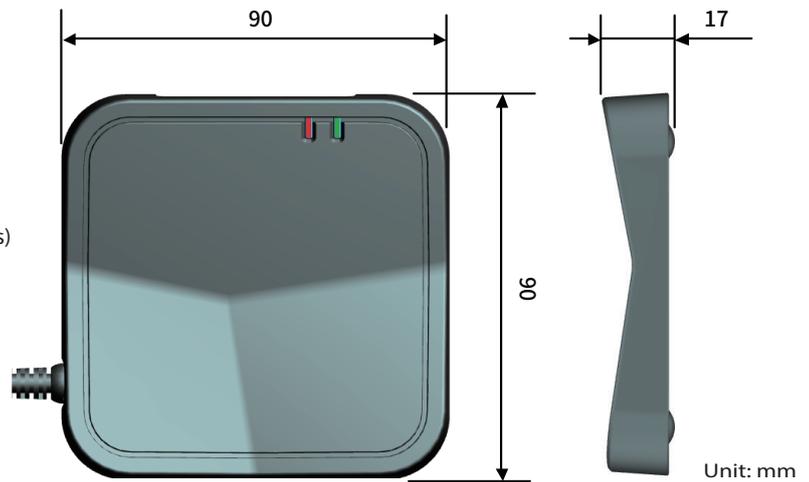
### ● Physical Characteristics

| Weight | |
|---|---|
| Body weight | Approx. 125g / 4.41 oz (w/o cable) |
| Material | ABS and Rubber stop |
| Cable Length | 5FT.（150cm） |
| Interface cable | USB or RS-232 |
| Dimension | 90 mm W x 90 mm H x 17 mm L |
| Color available | Black |

### ● Electrical Characteristics

| Interface | RS232 | USB |
|---|---|---|
| Supply Voltage | DC +5V ±5% | |
| Output Voltage (Typ.) | ±9V | +5V |
| Power On (Max.) | 120mA | 120mA |
| Stand by (Max.) | 110mA | 110mA |
| Operation (Max.) | 210mA | 210mA |

### ● Performance

| Operating Frequency | 13.56 MHz |
|---|---|
| Compliance | ISO14443 Type A & B |
| | ISO 15693   ISO 18092 Tag |
| | MIFARE |
| | FeliCa |
| Operating Distance | Up to 50 mm (depends on the tag type) |

### ● Model

| Model | Function | 13.56 MHz |
|---|---|---|
| RFR811 | Read Card UID only | ISO14443 Type A & B / ISO15693/ISO 18092 Tag/FeliCa |
| RFR811M | MIFARE read/write (APDU) | MIFARE |
| RFR811 i | ISO 15693 read/write (APDU) | ISO15693 |

### ● Environmental

| Operating Temperature | 0°C to 50°C (32°F to 122°F) |
|---|---|
| Storage Temperature | -20°C to 70°C (-4°F to 158°F) |
| Relative Humidity | 20% to 95% (Non-condensing) |
| Drop Resistance | 59.05 inches(150cm) |

### ● Optional mounting brackets

| Desktop Mounting Bracket | Wall / side Mounting Bracket |
|---|---|
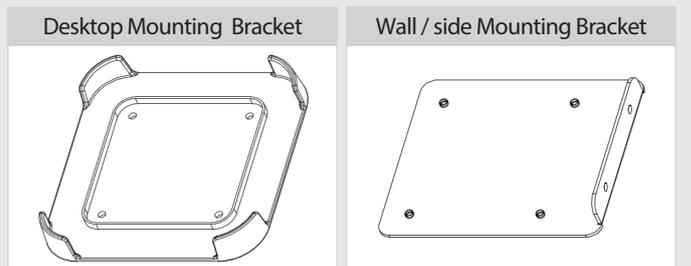
### ● Regulatory

| CE, FCC and LVD |
|---|

Due to Champtek´s continuing product improvement programs, pecifications and features are subjected to change without prior notices.

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