



**CHAMPTEK**<sup>®</sup>  
We value your ID's

# RFR811

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 (RFID) Technology. Compliant with the ISO/IEC18092 standard for Near Field Communication (NFC), it supports MIFARE<sup>®</sup>, ISO 14443 A and B, ISO15693 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 road 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 or NFC-enabled devices onto the RFR811 with ease.

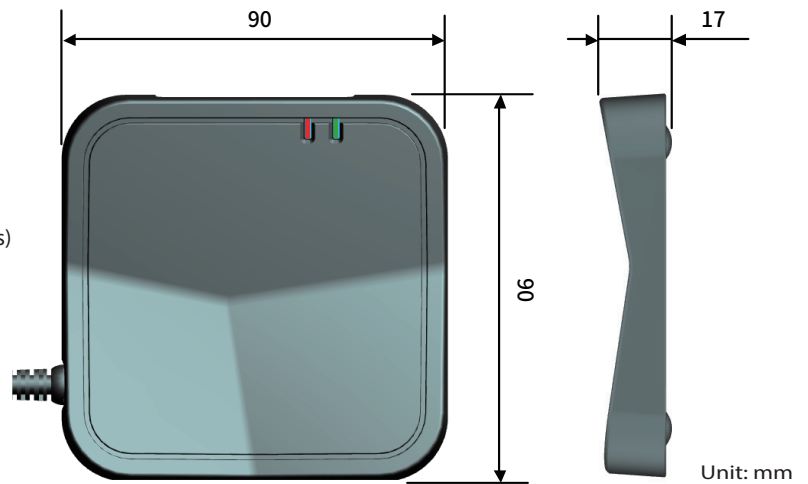
## Features

- Smart 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) Standards
  - 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:
  - Card mode for card UID reading function, Mifare (APDU command) read/write or ISO15693 read/write (NDEF format) in different models
  - Peer-to-Peer mode (TBD)
- RS232 or USB Interface support
- Peripherals
  - 2 color LED
  - buzzer
- An optional holder with it could mount the reader either on desk or wall

# RFR 811

## 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



## 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
	Mifare
	Felica
Operating Distance	Up to 50 mm (depends on the tag type)

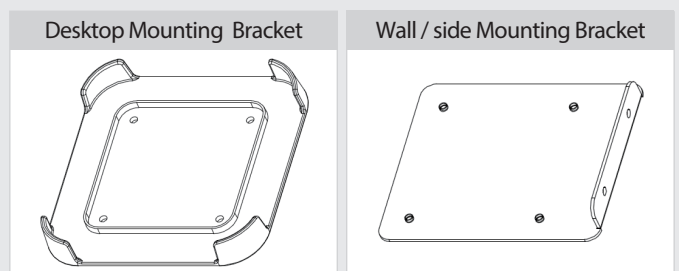
## Model

Model	Function	13.56 MHz
RFR811	Read Card UID only	ISO14443 Type A & B / ISO15693/Felica
RFR811M	Mifare read/write (APDU)	MIFARE
RFR811 I	ISO 15693 read/write (NDEF)	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



## Regulatory

CE, FCC and LVD

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