

CR100 Series

CR100: USB Dual Frequency Card Reader
(Enrollment Only)

CR100FR: USB Fingerprint Scanner and Dual Frequency
Card Reader (Enrollment Only)



RFID



USB



Overview

The **CR100 series** are compact USB desktop readers designed for efficient enrollment and management of contactless credentials across access control, time attendance, visitor management, and card issuance applications.

CR100 and CR100FR support both 13.56 MHz (HF) and 125 kHz (LF) technologies, the readers provide broad compatibility with legacy proximity cards and modern smart cards and NFC tags.

Built on a high-integration RF circuit design, the CR100 delivers reliable card detection with minimal electromagnetic interference, fast read performance (typical detection time ≤ 500 ms to UID), and read ranges up to 30 mm depending on card type. The USB 2.0 (Type-C) interface enables plug-and-play deployment via standard Custom USB Device and USB keyboard wedge modes on Windows, Android, mac OS, and Linux (on request)—no proprietary drivers required.

Features

- Support dual-frequency card 13.56 MHz and 125kHz ID and IC card.
- CR100FR is equipped with a high-performance optical fingerprint sensor.
- USB 2.0 (Type-C) charging.
- The red, green and blue LEDs indicate device status.

Specifications

General		
Model	CR100	CR100FR
Function	RFID (Read)	Fingerprint Scanner (Read) + RFID (Read)
Operating Frequency	13.56 MHz + 125 kHz (Dual-Frequency)	
Supported Card Types	ID card, IC card, CPU card, MF card	

Operating System	Windows 7 / 10 / 11 ; Android; mac OS; Linux (on request)
Reading Time	≤500 ms (typical)
Reading Distance	0~10mm (depending on environment and transponder)
Communication Interface	USB 2.0 (Type-C)
Audio Indicator	Internal buzzer
LED Indicators	Red (card reading failed) Green (card reading successful) Blue (Breathing blue light, standby)
Working Voltage	5V
Operating Temperature	-10°C - 55°C
Operating Humidity	10%-90% RH (non-condensing)
Dimensions	112 mm × 78 mm × 21.9 mm
Certification	CE, FCC, Equivalent to RoHS

Fingerprint Module(CR100FR)

Scanner Type	Optical
Sensing Area	15.24 * 20.32 mm
Image Size	300*400 pixels
Image Resolution	500 dpi
Grayscale	256 levels
Template Size	<2048 bytes
Data Encryption	AES-256 for image/ template transfer (via SDK)

RFID Card Module Supporting List

Working Frequency	ISO	Card Type	CR100RW
13.56MHz	ISO14443A	DESFire	√
		IC	√
		CPU	√
	ISO14443B	CEPAS	√
		Chinese ID Card	√
	JIS X6319-4	Sony FeliCa	√
ISO15693	15693 Card (NFC Tag)	√	
125KHZ		ID	√

Dimensions (mm)

