CIVINTEC®
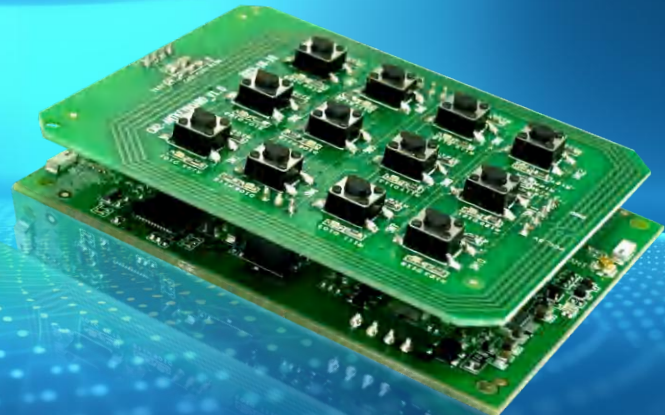
SMART CM3 NEW

Cloud HTTP/MQTT Wireless Battery-driven
RFID & BLE 5.4 & WiFi High Security
Terminal Solution

- Ultra-low power consumption
- Support Arm® TrustZone® for high security
- Support Desfire EV1/EV2/EV3
- A powerful platform for personalization
  and customization

Smart CM3 is the new generation of BLE 5.4 wireless high-performance multi technology platform. It provides an ultra-low battery-operated power consumption design, which contain the latest wireless interfacing and multiple identification technologies for customized design of access control, wireless electric lock, canteen management, asset tracking and different handheld applications.

Smart CM3 supports almost all RFID 13.56 MHz contactless technologies, including desfire EV1/EV2/EV3. It also supports NFC and BLE Mobile credentials for mobile application. Together with supporting Arm® TrustZone® and securable I/Os features, it meet the high security application.

Thanks to the latest technologies, it meet the Ultra-low power consumption requirement. Smart CM3 powerful platform is highly recommended for both hardware and software customization.

▶ Key Features

- Economic solution for battery powered ultra-low power consumption reader
- Support Arm® TrustZone® for high security
- Support RFID 13.56MHz smart card, Desfire EV1/EV2/EV3, NFC and BLE mobile credential
- Supports BLE 5.4 Zigbee, Thread and Matter protocol
- With Body detection function

What Solutions For Smart CM3 ?

- **Secure Access Control**

  Smart CM3 supports various credentials, including NFC/BLE mobile ID, popular smart cards RFID for personal identification. Bio-direction encrypted HTTP/MQTT communication via WiFi and BLE with gateway wireless communication between CM3 terminal reader and server for keyless access control, time attendance, visitor management, member management and IoT management, etc.
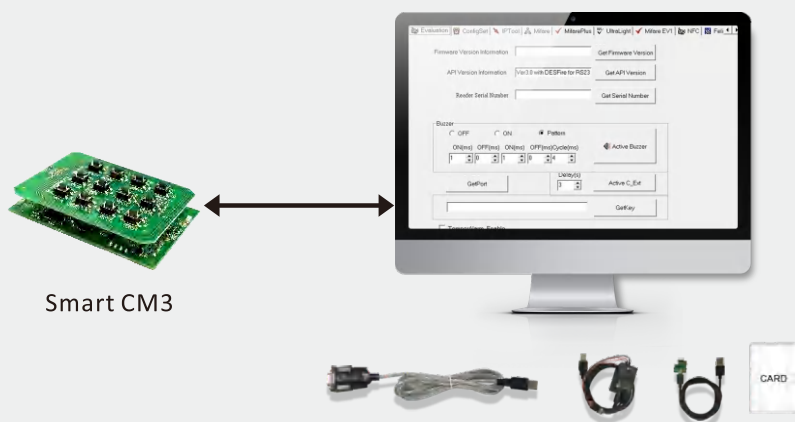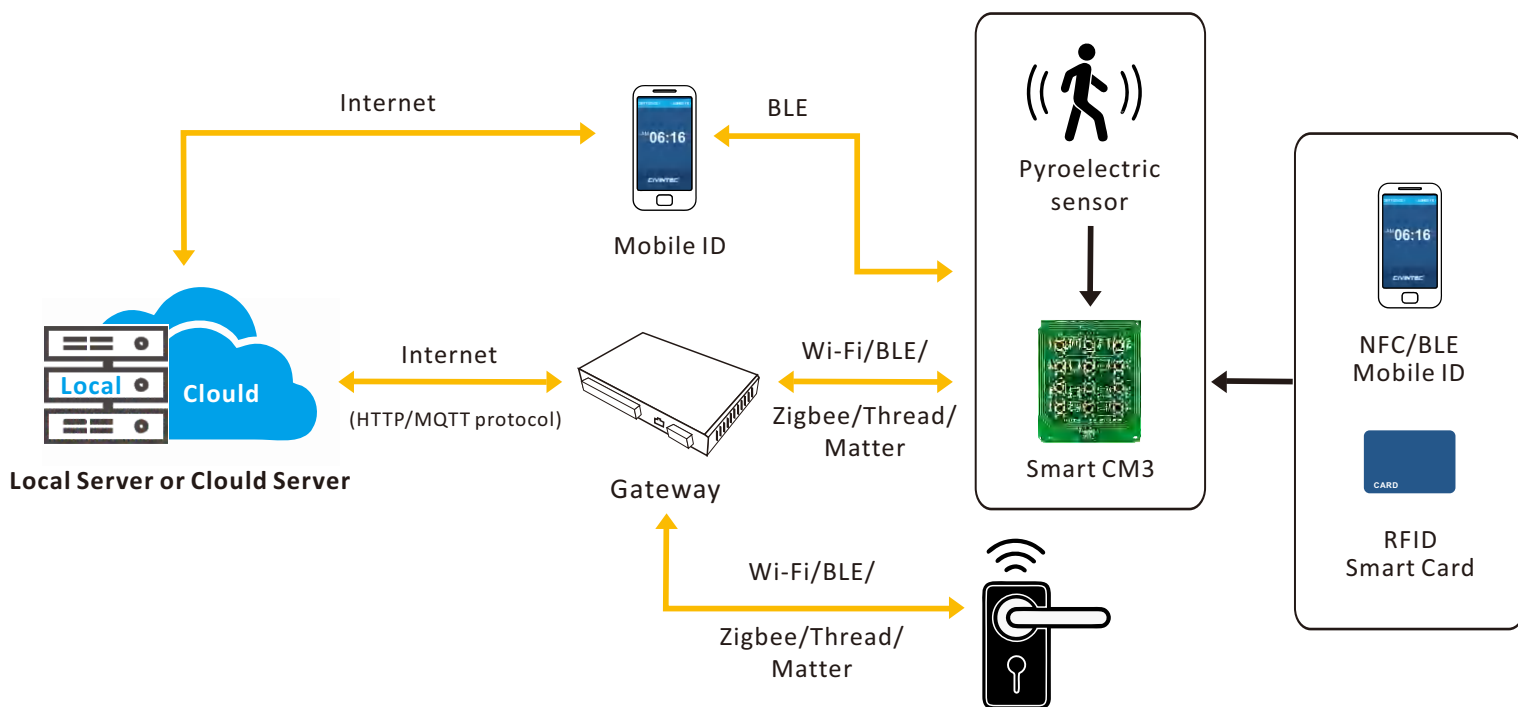
- **Localization**

  Smart CM3 reader provides economic local wireless battery powered RFID NFC reader using WiFi, BLE, for localization solution and provide additional customization design and manufacture service. When user present RFID/NFC card or mobile phone on CM3 reader, CM3 will read the data encoded in the card and transmit it with reader location to cloud service over WiFi, BLE. Server identify the card data and reader location to do various application management.

- **Asset Tracking and Management**

  Battery driven Smart CM3 is wireless reader ideal for portable applications to read & write RFID smart card and mobile ID tokens, and get wireless communication to server. Smart CM3 is widely used in asset tracking, as library book management, archives management, jewelry management, drug tracking management,etc. It also includes WiFi and BLE function, rechargeable and removable battery design to enable the device to have a mobile inventory function.

- **System Diagram**

Internet — Mobile ID — BLE

Local Server or Clould Server

Internet (HTTP/MQTT protocol) — Gateway

Wi-Fi/BLE/ Zigbee/Thread/ Matter — Pyroelectric sensor — Smart CM3

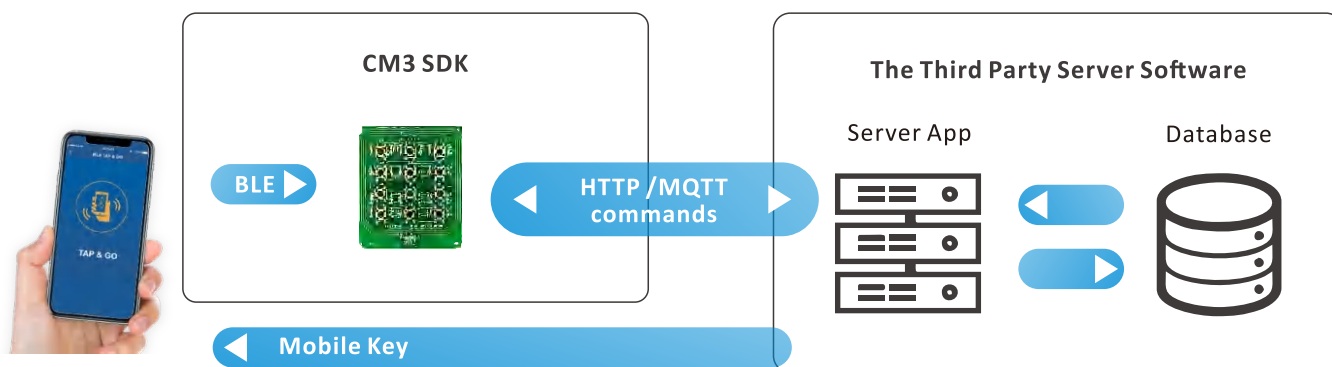Wi-Fi/BLE/ Zigbee/Thread/ Matter

NFC/BLE Mobile ID — RFID Smart Card

▶ **ConfigCard & Software**

With configcard software & configuration cards, users can easily configure all readers programable parameters such as indication behaviours, custom unique encryption keys and communication interface settings.

Smart CM3

▶ **For Developer**

CM3 terminal supply SDK for various third party software solution systems integration for general applications build.

CM3 SDK

BLE ▶

HTTP /MQTT commands

The Third Party Server Software

Server App   Database

Mobile Key

▶ Technical Specifications

CM family	CM3
IDENTIFICATION TECHNOLOGIES	
RFID ISO Standard &Cards	13.56MHz ISO14443A, ISO15693 and NFC standard • Mifare Classic CSN &Sector • DESfire EV1/EV2/EV3(2k/4k/8k)CSN &Sector • Ultralight/Ultralight C CSN &Sector • Mifare plus S,X CSN &Sector • NFC tag
Mobile Credential	• NFC mobile phone • BLE 2.4GHz
INTERFACES	
Communication Interfaces	• WiFi IEEE 802.11b/g/n • BLE 5.4(Slave mode , Thread , Zigbee , Matter) • USB (Type C)
Secure Interface	Embed the necessary security features for secure boot
Sensor	Body detection sensor
Fire alarm	On request
GENERAL	
Memory	4KB (on request)
Power Supply	4 * AA batteries
Indicators	Bio-color LEDs with red, green and amber colour and buzzer
Dimensions	59x50mm (The dimension is customizable on customer's request)
Operating Temperature	-20℃~60℃
Configuration Methods	Configuration card, reader tool software or factory configured readers.

∗ The specifications are subject to change without notice.