CIVINTEC

CT9 E

All-in-One Touch Keypad Wireless & POE Ethernet Cloud HTTP IoT & Access Control Terminal

Mobile Credential (NFC & BLE)

RFID Card

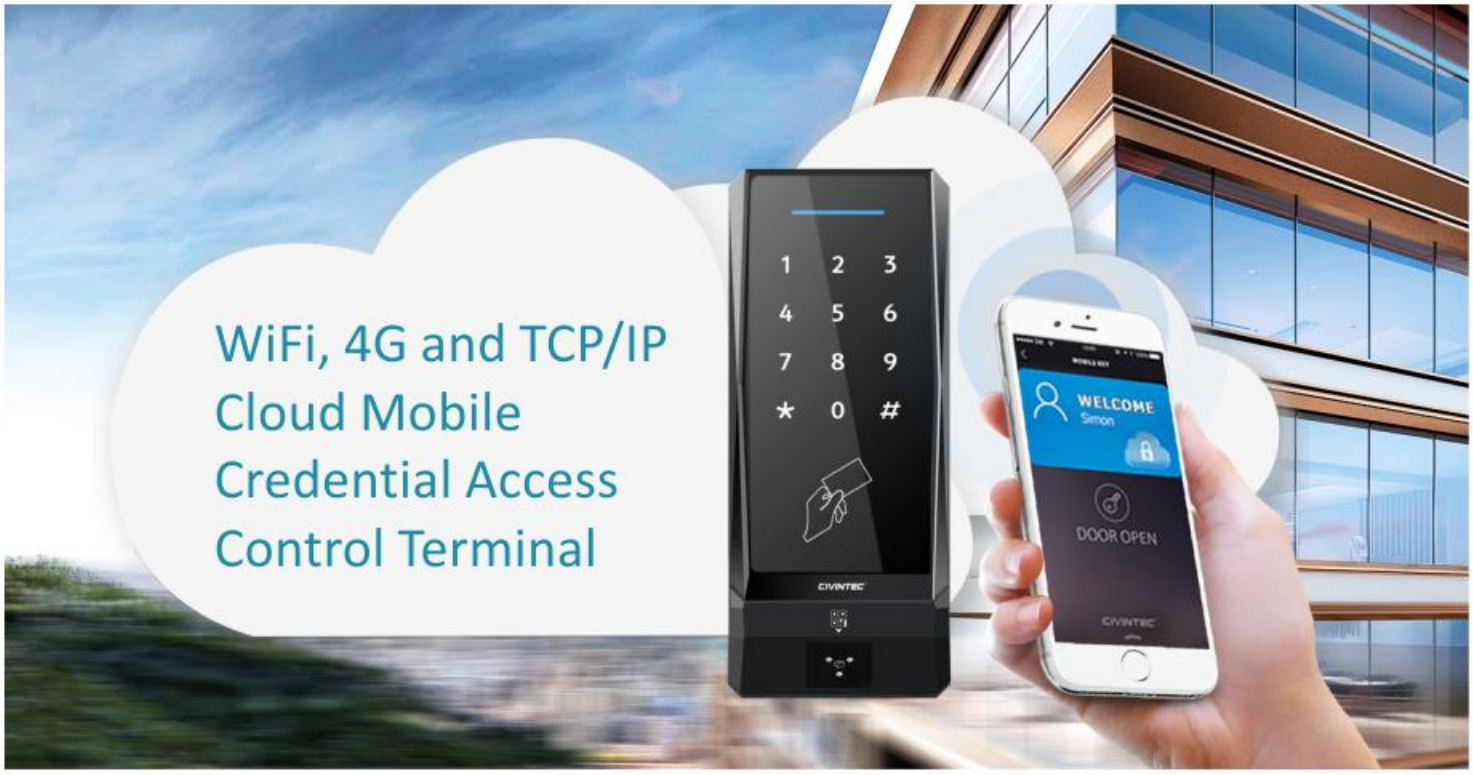
QR Code

Touch Pincode

CT9 E is Linux based HTTP/HTTPs server centralized terminal with wireless 4G, WiFi and TCP/IP Ethernet suitable for both LAN and Internet cloud server software communication. It supports both of online server real-time monitor HOST mode and standalone access control Local mode, perfect for multiple IoT & access control solutions. With IP65 ratings, CT9 family is weather resistant to rain, dust, strong sunlight, ideal for various rugged environments installations.

CT9 E incorporates with 4-in-1 multiple access credential technologies, touch keypad, RFID dual 125KHz & 13.56MHz smart Cards, BLE & NFC mobile access, QR CODE/Barcode by using mobile phone for access control & time attendance management. This combination makes the product flexible for all kinds of security applications and future technology requirements applicable for the security industry.

CT9 E comes with SDK for the third party software system integration perfect to build general IoT & security solutions. It also provides developer an easy access for visitor to communication via three-color LED indicators with green, red or yellow and show different operations and events.



Advantages

Multi-tech Mobile Credential

- Support BLE in iOS, NFC/BLE in Android, Configurable BLE Broadcast Range
- QR Code scanner with high-speed readability and large data capacity
- With dynamic QR Code generator to improve security for application requirements

Wire & Wireless Communications

- Support Wi-Fi and 4G LTE connectivity
- TCP/IP RJ45 port and Power Over Ethernet(PoE) for less wiring and cost-save installation

Cloud-Based System

- Support both local offline and online mode under server remote control in real time
- HTTP/HTTPs encrypted communication protocol

Easy Upgrade

- Server Remote Update via TCP/IP, WiFi, 4G
- BLE OTA update - wireless firmware updates
- Use ConfigCard software update Linux software and firmware

To Meet Requirement of The Highest level of Security

- RFID credentials are protected by DESFire® EV1/EV2/EV3 with AES encryption and MIFARE ® SAM AV2/AV3 (EAL5+/EAL6+)
- BLE credential is protected by AES encryption
- BLE and QR code credential extended to accommodate more data to strengthen credential encryption
- HTTPs protocol with enhanced CA certificate verification
- High-security access control system working with CN5 reader to achieve indoor-mounted relay controlling door lock for high security

Smart Access System

- 1~2 Relay Output design and input for Fire Alarm system integration
- Cloud-managed access control toggle to set door stays unlocked (free access), door stays locked (no access),normal access control (validates permissions)

General Applications

CT9 E wireless HTTP networked IoT & access control terminal is perfect to meet general applications and solutions. It provides server-based centralized remote applications control in real time, to control various kinds of door lock, turnstile, barrier and equipments. It supports multi-technologies for personal identification for staff, student and member management and track. With LED indicators and buzzer, it's intuitive for users to view the status of door opening and avoiding intrusion without authorization.

Access Control

- Physical access control
- Function room reservation
- Car parking entry control
- Turnstile & barrier control
- Lift control
- Bank, government and data centers

Time Attendance

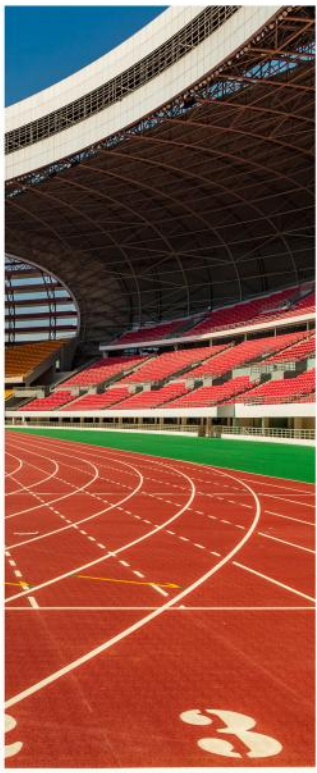
- Labor time attendance
- Mobile working track
- Cloud real-time attendance

Loyalty & Payment

- Membership
- Personal Identification
- E-Wallet
- Booking & Reservation

IoT Facility Control

- Personal identification & equipment control
- Vehicle control
- Light control



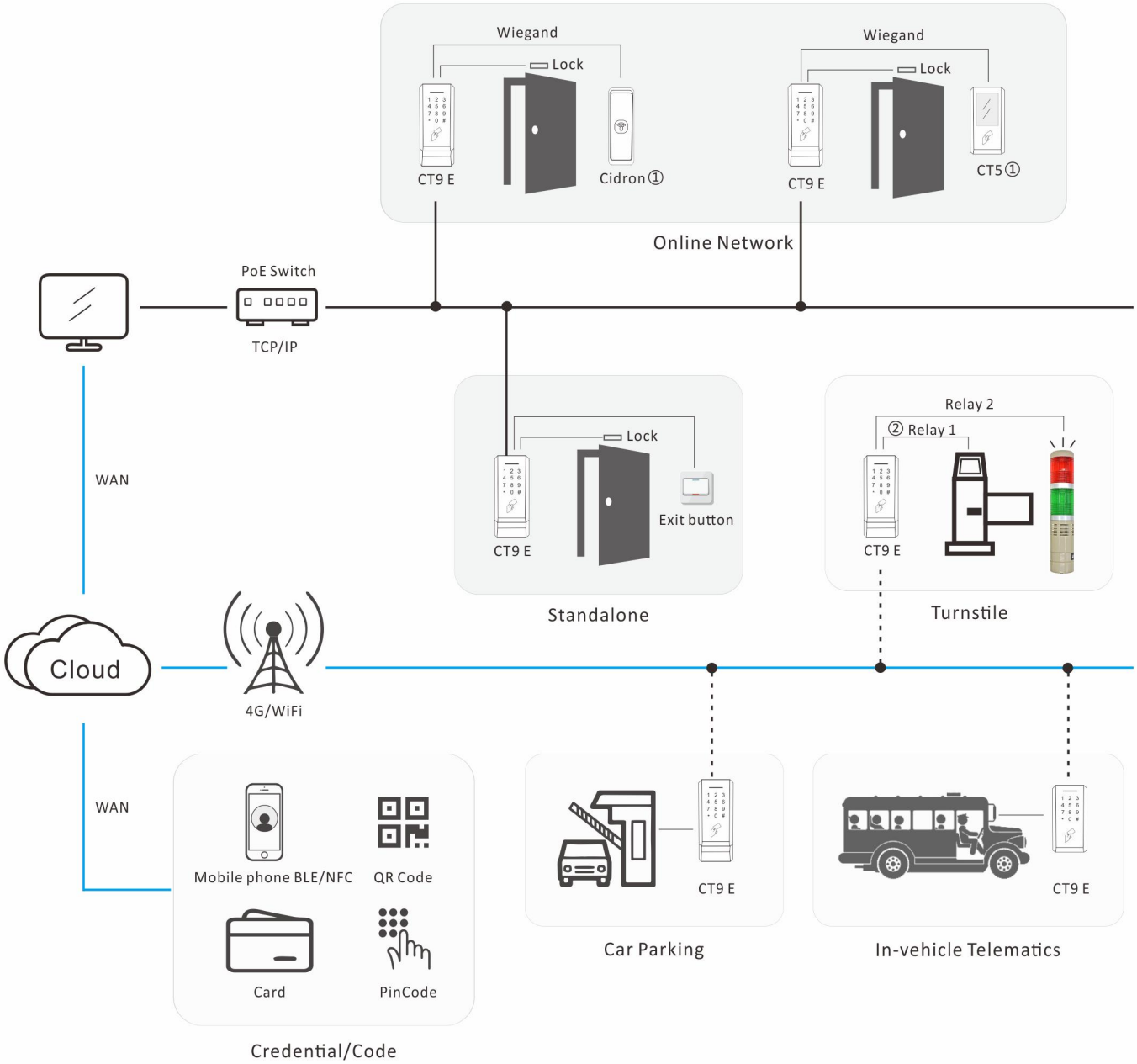
CT9 E Application Cases

- Office access control & time attendance
- Cleaning staff attendance management
- Condominiums door control
- School student access control and campus wallet
- School bus student getting on and off tracking
- Campus car parking
- Park & museum ticket checking and access control
- Gym & course management
- Golf courses & Tennis court
- Factory equipment control
- High-security access control for banking institutions, government buildings and data centers

* Learn more CT9 E solutions

Configuration

- CT9 E is HTTP networked IoT & access control terminal, with RJ45 port and Power Over Ethernet(PoE) for less wiring and cost-save installation.
- With optional wireless 4G and WiFi features, CT9 E is no limitation for various usage occasions with less network on site.
- With IP65 ratings, CT9 E is weather resistant to rain, dust, strong sunlight for rugged environment installations.



① CT9 E APB Access Control Reader

CT9 E works with Civintec Cidron,CT5 and CN56X0B family access control reader for the best working performance and achieve an encrypted secure level of smart card, and QR code, NFC & BLE mobile credential technologies.

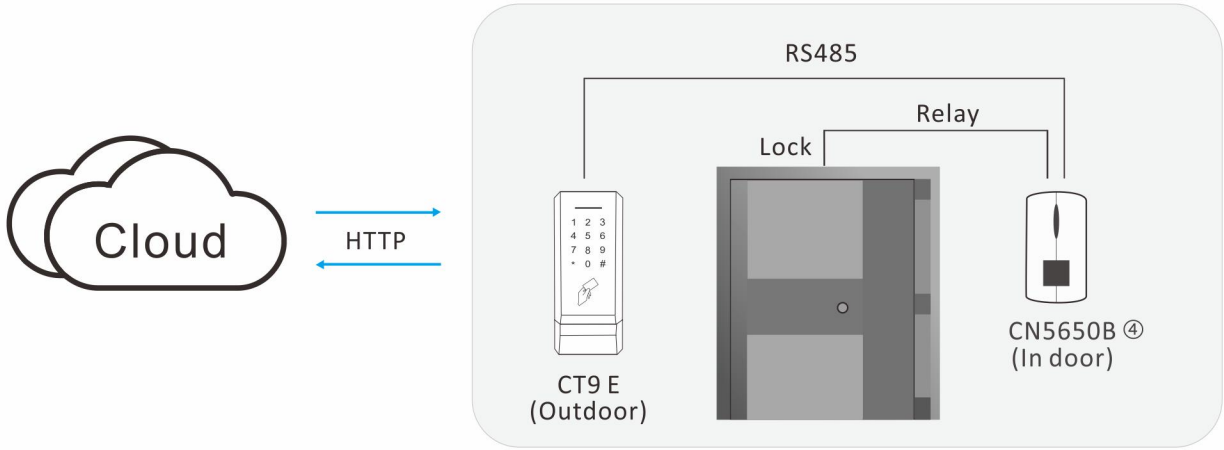
② CT9 E Dual Relay Outputs

With 2 relay outputs, CT9 E smart HTTP IoT access control terminal is ideal to remotely manage and control the electric lock, light or facility by central server in real time.

③ **Flexible & easy management dual working modes**

CT9 E works in online mode and offline mode. Online Mode, When CT9 E detects the card/ QR code/Mobile Credential /Pin code, it sends the data to the server through an HTTP post message for door lock control. In case of a failure of connection, CT9 E has local memory to store 10,000 IDs and 50,000 logs (More on request) for identification, when CT9 E get server connection again, CT9 E upload the event logs to server and switch to online mode.

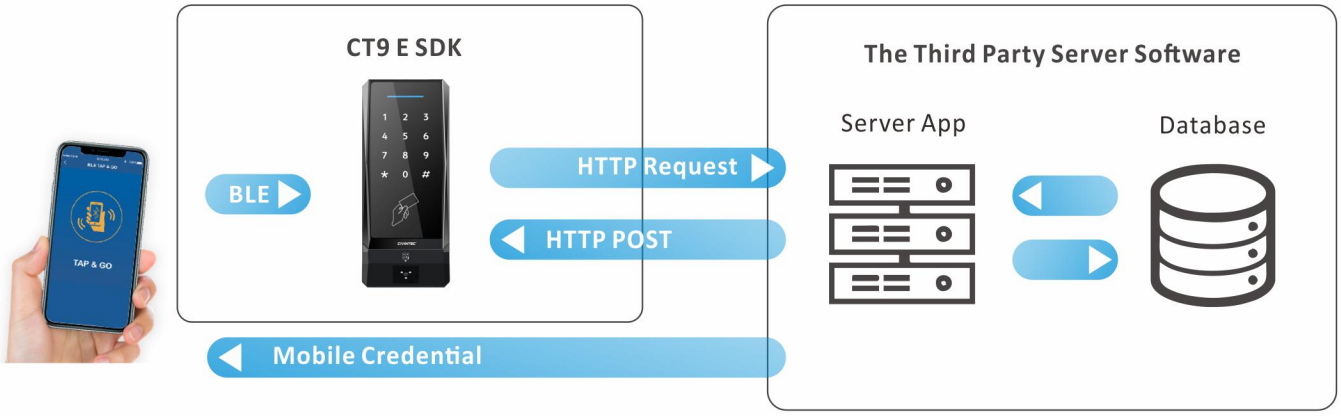
- For High-security access control environments as banking institutions, government buildings and data centers, CT9 E supports smart switching mode that can be configured to slave reader mode installed at entry points, seamlessly works with CN5650B relay-enabled card reader at interior exits.



④ In this solution, CT9 E must be used in conjunction with CN5650B-4R-0C. Please Contact sales@civintec.com for more information.

For Developer

As wireless smart HTTP IoT and access control terminal, CT9 E supply SDK for various third party software solution systems integration for general applications build. CT9 E SDK includes developer guidance, HTTP commands, PC ConfigCard software, smart phone demo App and example codes to greatly ease software development. HTTP commands is available for developer to get communication between CT9 E and server software, workable for both LAN and internet server software integration.



- **Controllable LED indicator & Customizable logo service**

  Multicolor LED provides visual indications with green, red or yellow. The LED , Speaker and buzzer can all be configured to indicate different operations and events using buzzer or light to communicate with the user. Customize your logo on device printing area.

- **Print Your LOGO on Device**

  Silk print your brand LOGO image on device printing area.

- **Hardware Testing Package**

HTP CT9 E supply HTP - plug & play hardware testing package for developer. It includes all the must-have accessories and Configcard software to establish full testing environment for terminal test, full functions setting, software development and firmware/system upgrading.

Specification

CRYSTAL TOUCH	CT9 E
IDENTIFICATION TECHNOLOGIES	
RFID Contactless Cards	• 125KHz PROx, 125KHz EM • 13 . 56MHz Mifare® Classic, Ultralight® , Mifare® Plus, DESFire® EV1/ EV2/ EV3, NFC tags
Mobile Credential	• BLE, NFC (Support BLE in iOS, and NFC/BLE in Android) • QR Code
Barcode / QR scanner	• Decode range: 20mm-150mm(QR 20MIL) • Roll/Pitch/Yaw: 360°, +55°, +55° • Multiple formats supported (1D & 2D Codes): QR Code, Micro QR code, PDF417, Code 128, Code 39 and most mainstream 1D and 2D barcodes.
Keypad	12 digit Touch keypad in 4 rows of 3 keys in each row with white LED backlit controlled to ON/OFF and auto, intensely adjustable
INTERFACE	
Communication Interfaces	• TCP/ IP(RJ45) • 4G • WiFi 2 .4GHz IEEE802.11b/g/n • RS485, wiegand input • BLE 5.3 and has the ability(on request) to support thread and zigbee
I/O port	3* Inputs - Door contact, Door exit, Buzzer control 4* Outputs - Tamper alarm switch, Output Buzzer control, Access Granted, Access Denied
Relay	1 or 2 relay outputs (relay for lock control function can be optional by indoor or outdoor control)
Fire alarm	Supports fire alarm signal input (excluding model CT9 E-XX-X-2R)
GENERAL	
Operating System	LINUX
Access control mode	Mobile Credential, QR Code, RFID Card, Pincode
Working Mode	Host mode or Local mode
Online Card Users /Event logs	Unlimited
Offline Card Users / Event logs	10,000 users / 50,000 logs (More on request)
APB access control	Yes, external wiegand reader
Indicators	• Controllable tri-color LEDs with red, green, blue and amber colour • Controllable Buzzer and speaker
Housing Dimensions	Basic Model: 24mm(D) * 165mm(H) *84mm(W) QR/4G/ PoE Model: 45mm(D) * 200mm(H) *84mm(W)
Power supply	• 12~ 24V DC • PoE IEEE 802 . 3af
Installation	Wall mount with terminal block connector
Protection Class	IP65 electric epoxy potted (request waterproof spacer) Resistant to UV ray
Operation Temperature	-20°C ~ 60°C
Operation Humidity	0-90% relative humidity non-condensing
Upgrade	Support software and firmware upgrade

* The specifications are subject to change without notice.

CT9 E Models Selection Guidance

Housing Dimensions:
24mm(D) * 165mm(H) * 84mm(W)

Type: Touch Digital Keypad

Model Name: CT9 E-X-X
Case Model: S

Housing Dimensions:
45mm(D)*200mm(H)*84mm(W)

Type: Touch Digital Keypad

Model Name: CT9 E-X-X
Case Model: L

CT9 E Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm
CT9 E-M-T	S	√ No 125KHz	√			√			√	1	√
CT9 E-ME-T	S	√	√			√			√	1	√
CT9 E-ME-T-2R	S	√	√			√			√	2	
CT9 E-W	S	√	√			√		√	√	1	√
CT9 E-W-2R	S	√	√			√		√	√	2	
CT9 E-T-Q	L	√	√	√		√			√	1	√
CT9 E-T-Q-2R	L	√	√	√		√			√	2	
CT9 E-T-P	L	√	√		√	√			√	1	√
CT9 E-T-P-2R	L	√	√		√	√			√	2	
CT9 E-T-QP	L	√	√	√	√	√			√	1	√
CT9 E-T-QP-2R	L	√	√	√	√	√			√	2	
CT9 E-H	L	√	√			√	√		√	1	√
CT9 E-H-2R	L	√	√			√	√		√	2	
CT9 E-H-Q	L	√	√	√		√	√		√	1	√
CT9 E-H-P	L	√	√		√	√	√		√	1	√
CT9 E-H-P-2R	L	√	√		√	√	√		√	2	
CT9 E-H-QP	L	√	√	√	√	√	√		√	1	√
CT9 E-W-Q	L	√	√	√		√		√	√	1	√
CT9 E-W-QP	L	√	√	√	√	√		√	√	1	√
CT9 E-W-Q-2R	L	√	√	√		√		√	√	2	
CT9 E-HW	L	√	√			√	√	√	√	1	√
CT9 E-HW-2R	L	√	√			√	√	√	√	2	
CT9 E-HW-Q	L	√	√	√		√	√	√	√	1	√
CT9 E-HW-QP	L	√	√	√	√	√	√	√	√	1	√
CT9 E Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm