

# CT9 E

Powerful Touch Keypad Wireless & POE Ethernet with BLE 5.3
Cloud HTTP IoT & Access Control Terminal







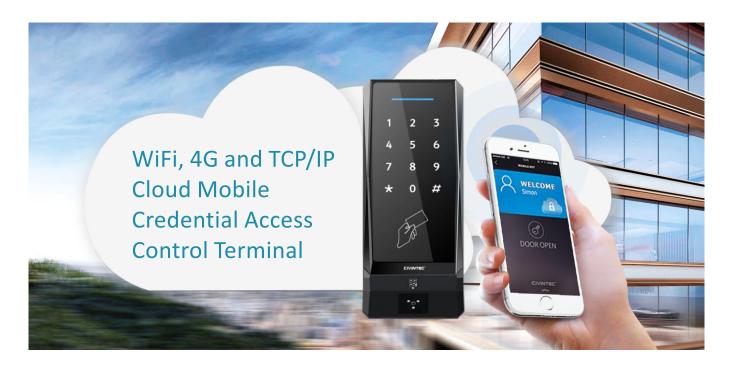




QR Code



**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 visitor access control 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.

# Features make your solution different and competitive

- Touch digital keypad with controllable LED indicator for visitor to intuitive access control
- Support mobile credential by using personal mobile phone and smart watch via QR Code, BLE, NFC and HID
  mobile virtual card multi-technologies
- · With embedded QR Code scanner and dynamic QR Code generator for temporary visitor access control
- Support DESFire EV1/EV2/EV3 encrypted smart cards and HID Seos, iCLASS smart cards
- Support RJ45 port and Power Over Ethernet(PoE) for less wiring and cost-save installation
- Support both of local offline and online mode under server remote control in real time
- Wireless 4G, WiFi perfect for various usage occasions with less network on site
- Support HTTP & HTTPs encrypted communication protocol
- · Support Thread & Zigbee encrypted communication protocol for smart home device (on request)
- Wiegand input for APB secure slave access control reader
- With 1 or 2 relay outputs separately controlled by server
- Partial model support with inputs for external fire alarm system integration
- Support software and firmware remote upgrade
- Protected by IP65 waterproof and UV-resistance for outdoor under strong UV ray
- · Cost effective customization service from hardware, software to firmware

## **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



#### **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











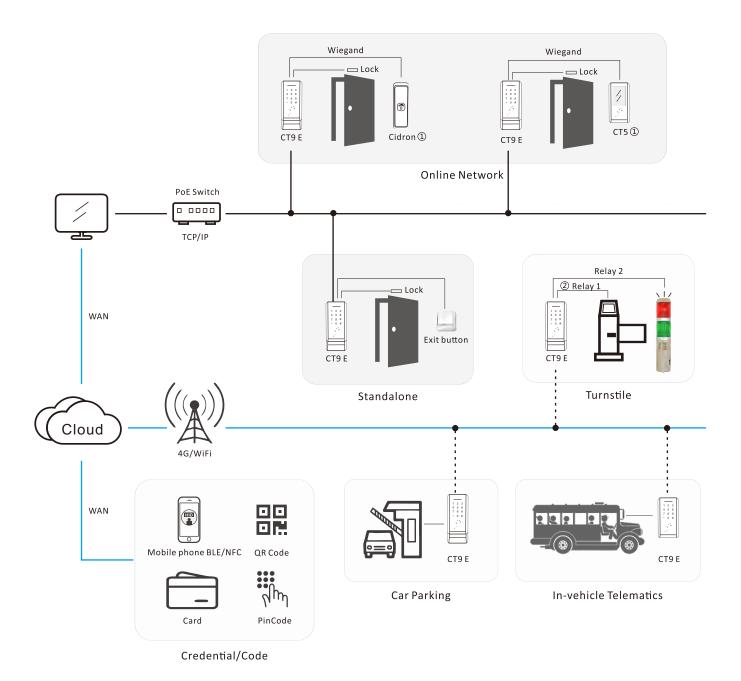
#### **CT9 E Application Cases**

- 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

# Configuration

- CT9 E is HTTP networked IoT & access control terminal, with RJ45 port and Power Over Ethernet(PoE) for less wiring and cost-
- 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

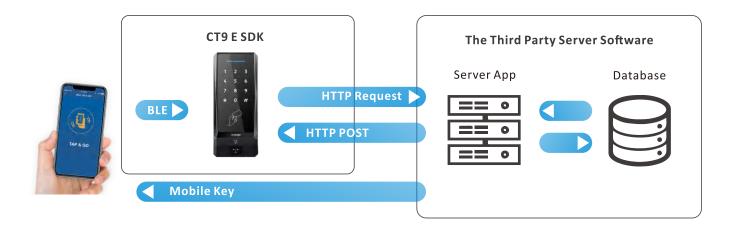
With wiegand input, CT9 E works with Civintec Cidron and CT5 family access control slave reader for the best working performance and achieve an encrypted secure level of smart card, and QR code, NFC & BLE mobile credential technologies.

#### 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.

## 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.



#### 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 ID/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 upload the event logs to server and switch to online mode.



#### • 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.



#### 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 tool 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	<ul> <li>125KHz PROx, 125KHz EM</li> <li>13.56MHz Mifare® Classic, Ultralight®, Mifare® Plus, DESFire® EV1/EV2/EV3, NFC tags</li> </ul>								
Mobile Credential	BLE (2.4GHz), NFC								
Barcode / QR scanner	<ul> <li>Decode range: 20mm-150mm(QR 20MIL)</li> <li>Roll/Pitch/Yaw: 360°, +55°, +55°</li> <li>Multiple formats supported (1D &amp; 2D Codes): QR Code, Micro QR code, PDF417, Code 128, Code 39 and most mainstream 1D and 2D barcodes.</li> </ul>								
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	<ul> <li>TCP/IP(RJ45)</li> <li>4G</li> <li>WiFi 2 .4GHz IEEE802.11b/g/n</li> <li>RS485, wiegand input</li> <li>BLE 5.3 and has the ability(on request) to support thread and zigbee</li> </ul>								
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								
Fire alarm	1 input to connect fire alarm the supported models refer to Page 8								
GENERAL									
Operating System	LINUX								
Access control mode	Mobile ID, QR Code, RFID Card, Pincode								
Online Card Users / Event logs	Unlimited								
Offline Card Users / Event logs	10,000 users / 50,000 logs (More on request)								
Working Mode	Host mode or Local mode								
APB access control	Yes, external wiegand reader								
Indicators	<ul> <li>Controllable tri-color LEDs with red, green, blue and amber colour</li> <li>Controllable Buzzer and speaker</li> </ul>								
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								

 $<sup>\</sup>ensuremath{^*}$  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	<b>√</b>			<b>√</b>			<b>√</b>	1	<b>√</b>
CT9 E-ME-T	S	$\checkmark$	$\checkmark$			$\checkmark$			$\checkmark$	1	$\checkmark$
CT9 E-ME-T-2R	S	$\checkmark$	$\checkmark$			√			<b>√</b>	2	
CT9 E-W	S	√	<b>√</b>			<b>√</b>		√	√	1	√
CT9 E-W-2R	S	√	<b>√</b>			<b>√</b>		√	√	2	
CT9 E-T-Q	L	$\checkmark$	$\checkmark$	<b>√</b>		$\checkmark$			<b>√</b>	1	<b>√</b>
CT9 E-T-Q-2R	Ĺ	$\checkmark$	√	<b>√</b>		√			√	2	
CT9 E-T-P	L	$\checkmark$	<b>√</b>		<b>√</b>	<b>√</b>			<b>√</b>	1	<b>√</b>
CT9 E-T-P-2R	L	$\checkmark$	<b>√</b>		√	<b>√</b>			<b>√</b>	2	
CT9 E-T-QP	L	$\checkmark$	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>			<b>√</b>	1	<b>√</b>
CT9 E-T-QP-2R	L	√	<b>√</b>	<b>√</b>	√	<b>√</b>			<b>√</b>	2	
CT9 E-H	L	$\checkmark$	<b>√</b>			<b>√</b>	<b>√</b>		$\checkmark$	1	<b>√</b>
CT9 E-H-2R	L	√	<b>√</b>			<b>√</b>	<b>√</b>		<b>√</b>	2	
CT9 E-H-Q	L	$\checkmark$	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>		$\checkmark$	1	√
CT9 E-H-P	L	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>	1	<b>√</b>
CT9 E-H-P-2R	L	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>		$\checkmark$	2	
CT9 E-H-QP	L	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>	1	<b>√</b>
CT9 E-W-Q	L	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>		<b>√</b>	√	1	<b>√</b>
CT9 E-W-QP	L	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>	√	1	√
CT9 E-W-Q-2R	L	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>		<b>√</b>	<b>√</b>	2	
CT9 E-HW	L	√	<b>√</b>			√	<b>√</b>	<b>√</b>	√	1	√
CT9 E-HW-2R	L	<b>√</b>	<b>√</b>			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	2	
CT9 E-HW-Q	L	√	<b>√</b>	√		<b>√</b>	<b>√</b>	<b>√</b>	√	1	√
CT9 E-HW-QP	L	√	<b>√</b>	√	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	√	1	√
CT9 E Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm