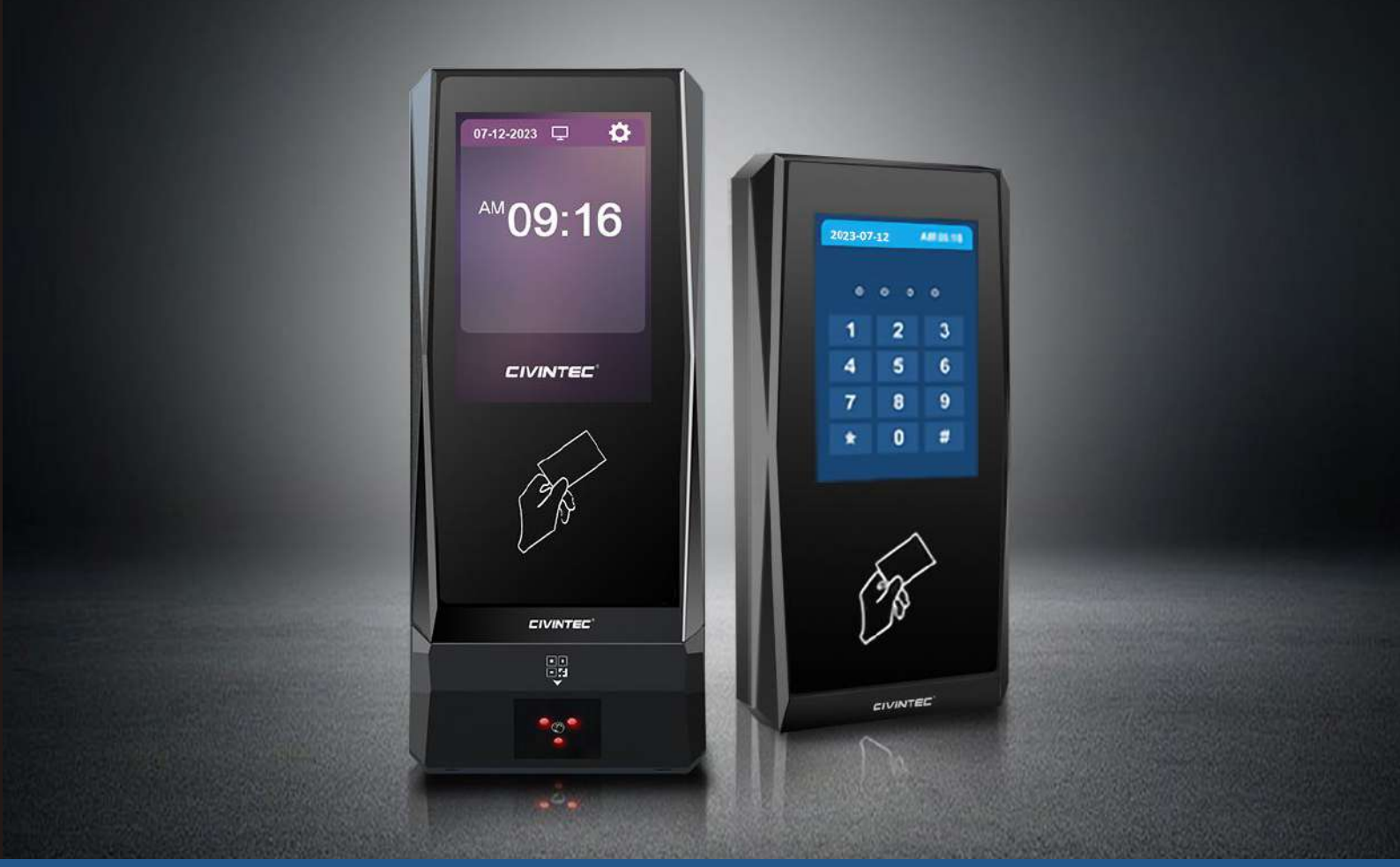
CT9 PRO-W CRYSTAL TOUCH

Smart Wireless & Ethernet PoE Cloud HTTP
Access Control Terminal supporting HID® / RFID card technology



Mobile Credential (NFC & BLE)

HID® / RFID Card

QR Code

Touch Pincode

Smart Watch

CT9 PRO-W Family 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 PRO-W family is weather resistant to rain, dust, strong sunlight, ideal for various rugged environments installations.

CT9 PRO-W family incorporates with 5-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. CT9 PRO-W family support HID® iCLASS® and HID® Seos® technologies, as well as HID® Mobile Access, enabling trusted identity for secure access to various applications, ensuring trusted identity for secure access, mobility, and advanced applications , this combination makes the product flexible for all kinds of security applications and future technology requirements applicable for the security industry.

CT9 PRO-W family comes with SDK for the third party software system integration perfect to build general IoT & security solutions. It also provides developer an easy access to display customized and intuitive UI, background image and real-time TEXT on 3.5" touch screen.

Intuitive Touch Screen

- 3.5” Touch Screen Linux OS with SDK
- Programmable UI, background image with text content
- Branding LOGO modification

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

Cloud-Based System

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

Function Keys

- Function Keys record different activity as clock in/out, overtime, breaks and other events
- Programmable definitions to trigger specific events

  Customizable to expand and add more keys

Easy Upgrade

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

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

To Meet Requirement of The Highest level of Security

- RFID credentials are protected by DESFire® EV1/EV2/EV3 with AES encryption
- 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 PRO-W Family 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 3.5” touch screen, it’s intuitive for users to view the status of door opening, time tracking, reservation, displayed information or announcements in real time.

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 & Hospitality

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

IoT Facility Control

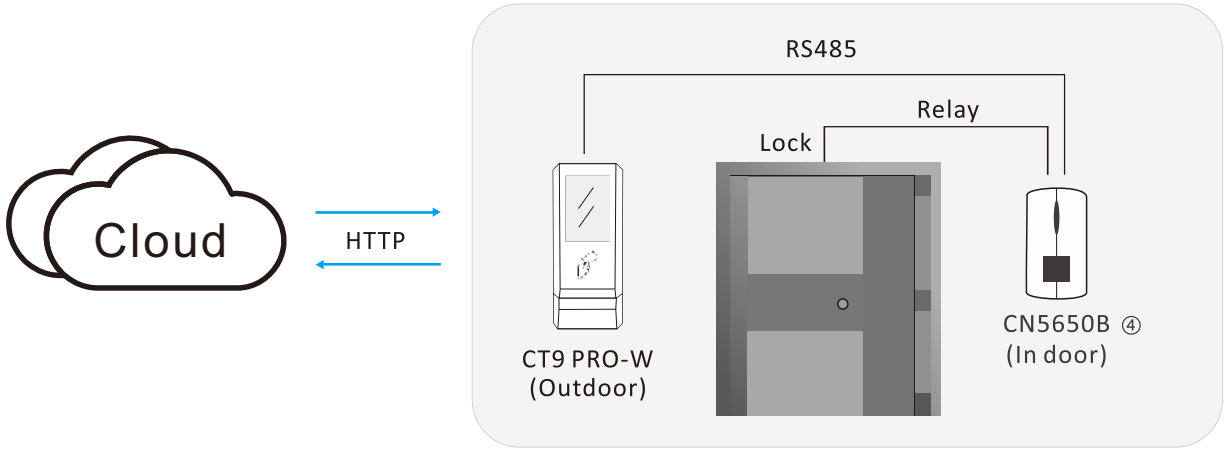
- Personal identification & equipment control
- Vehicle control
- Light control

* Learn more CT9 PRO-W Family solutions

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

CT9 PRO-W Family works in online mode and offline mode. Online Mode, When CT9 PRO-W Family 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 PRO-W Family has local memory to store 10,000 IDs and 50,000 logs (More on request) for identification, when CT9 PRO-W Family get server connection again, CT9 PRO-W Family upload the event logs to server and switch to online mode.

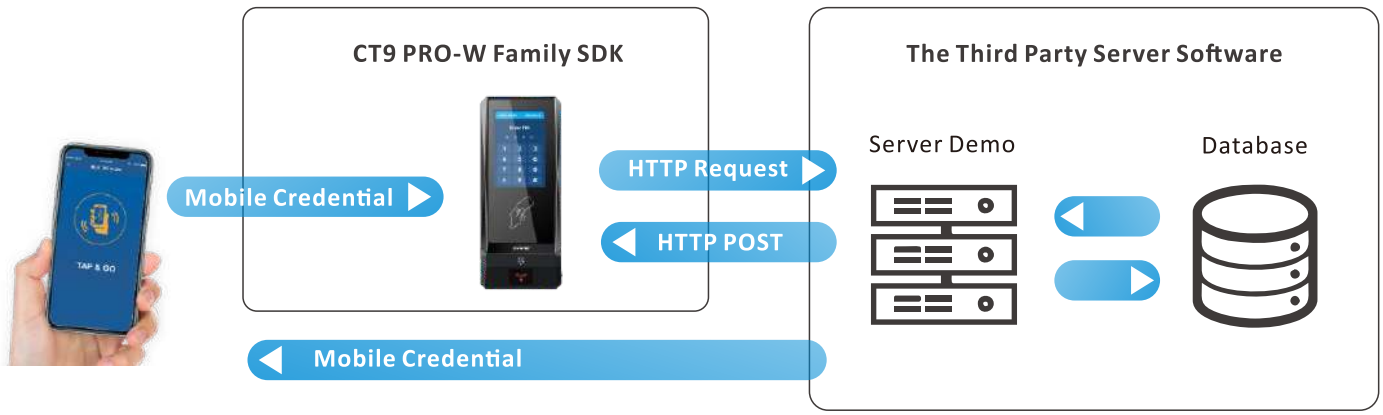
- For High-security access control environments as banking institutions, government buildings and data centers, CT9 PRO-W Family supports smart switching mode that can be configured to slave reader mode installed at entry points, seamlessly works with CN5650B relay-enabled card reader at interior exits.



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

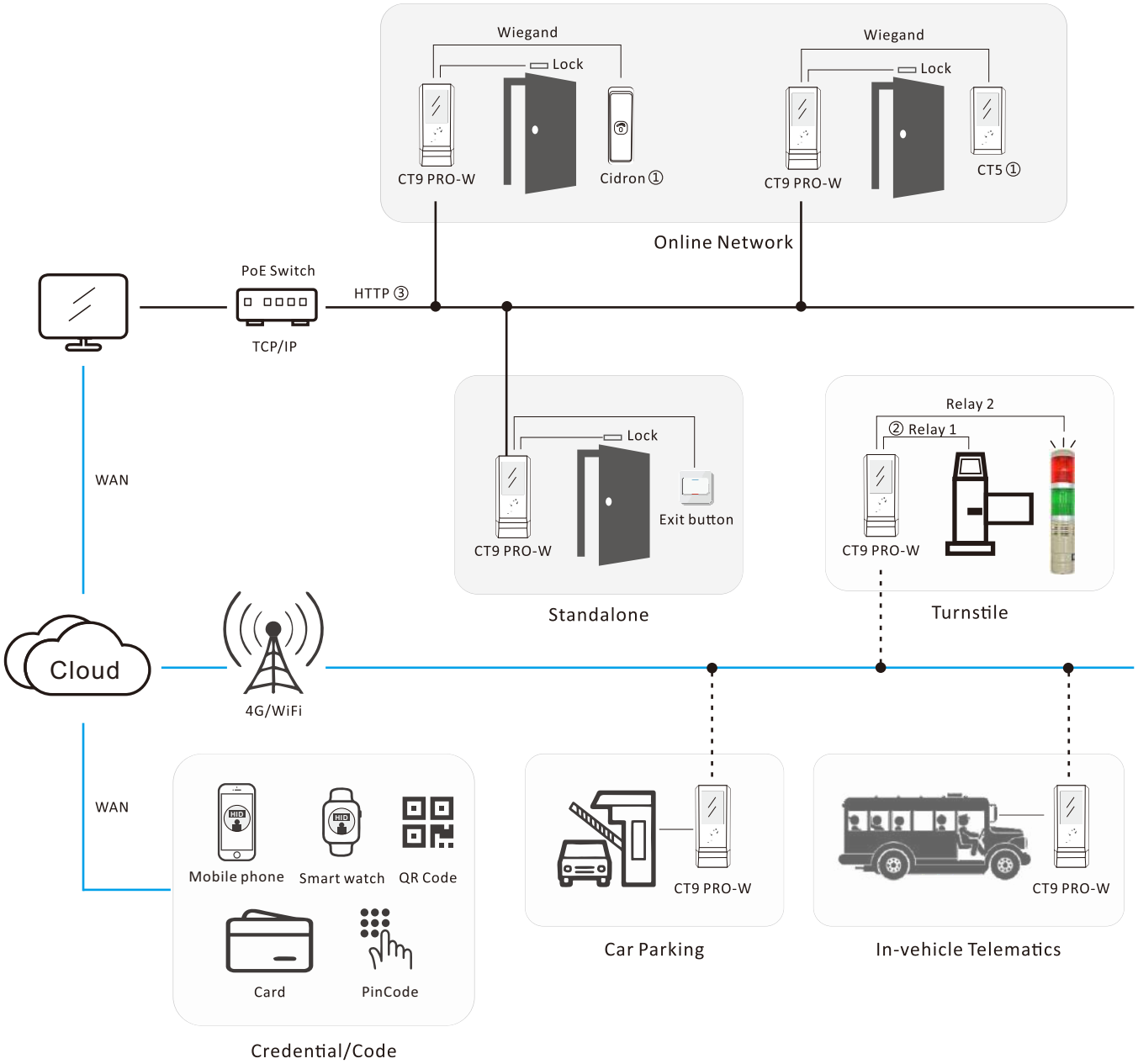
For Developer

As wireless smart HTTP IoT and access control terminal, CT9 PRO-W Family supply SDK for various third party software solution systems integration for general applications build. CT9 PRO-W Family 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 PRO-W Family and server software, workable for both LAN and internet server software integration.



Configuration

- CT9 PRO-W Family 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 PRO-W Family is no limitation for various usage occasions with less network on site.
- With IP65 ratings, CT9 PRO-W Family is weather resistant to rain, dust, strong sunlight for rugged environment installations.



① CT9 PRO-W Family APB Access Control Reader

CT9 PRO-W Family 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 PRO-W Family Dual Relay Outputs

With 2 relay outputs, CT9 PRO-W Family 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.

Developer is able to customize and display specific background image with TEXT information on 3.5" touch screen controlled by server via HTTP command for user to view the real time information, announcement.



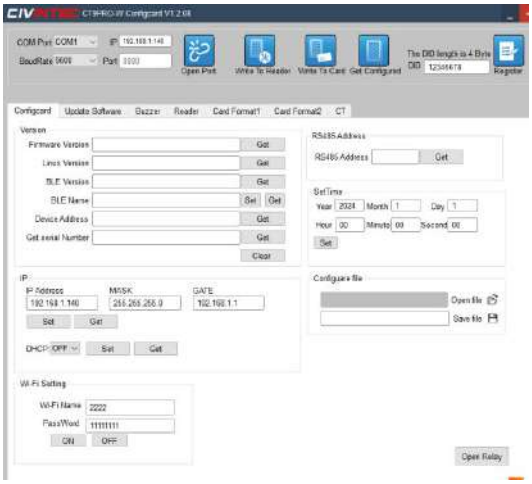
- CUSTOMIZE YOUR BACKGROUND IMAGE
- DISPLAY REAL TIME TEXT INFROMATION
- DISPLAY YOUR LOGO IMAGE
- CHANGE AUDIO FILE

- **Hardware Testing Package and software development**

HTP CT9 PRO-W Family 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.



- **ConfigCard Software Features**



Retrieve configuration data and version information, including BLE, Linux OS and Firmware versions

Upgrade the firmware and Linux OS

Set configuration parameters

Specification

CRYSTAL TOUCH PRO	CT9 PRO-W	CT9 PRO-D
IDENTIFICATION TECHNOLOGIES		
RFID Contactless Cards	• 125KHz HID® PROX™, 125KHz EM • 13.56MHz Mifare® Classic, Ultralight® , Mifare® Plus, DESFire® EV1/EV2/EV3, NFC tags	• 13.56MHz Mifare® Classic, Ultralight®, Mifare® Plus, NFC tags, DESFire® EV1/EV2/EV3; HID® iCLASS®, HID® Seos® • 125KHz HID® PROX™, Indala, EM4100/4102 and HITAG
Mobile Credential	• BLE, NFC (Support BLE in iOS, and NFC/BLE in Android) • QR Code	• BLE, NFC and HID mobile virtual card • 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	Touch screen keypad 12 keypad in 4 rows of 3 keys	
INTERFACE		
Communication Interfaces	• TCP/ IP(RJ45) • 4G • WiFi 2 .4GHz IEEE802.11b/g/n • RS485, wiegand input • BLE 5.3 and has the ability to support thread and zigbee (on request)	• TCP/ IP(RJ45) • 4G • WiFi 2 .4GHz IEEE802.11b/g/n • RS485, wiegand input
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 -X-XX-2R)	----
GENERAL		
Operating System	LINUX	
Display	3.5” touch screen	
Identification mode	Mobile Credential, QR Code, HID® / 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	• TP display • 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	12~24V DC
Installation	Wall mount with terminal block connector	
Protection Class	• IP65 electric epoxy potted (request waterproof spacer) • Resistant to UV ray (suitable for UV-resistance model)	
Operation Temperature	-20°C ~ 60°C	
Operation Humidity	0-90% relative humidity non-condensing	
Upgrade	Software and firmware upgrade supported	

* The specifications are subject to change without notice.

CT9 PRO-W Models Selection Guidance



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

Type: 3.5" Touch Screen

Model Name: CT9-XX-W-(UV)
Case model: S



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

Type: 3.5" Touch Screen

Model Name: CT9-(X)W-X-X-(UV)
Case model: L

CT9 PRO-W Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm
CT9-M-T CT9-M-T-UV *	S	√ (no 125KHz)	√			√			√	1	√
CT9-M-T-2R CT9-M-T-2R-UV *	S	√ (no 125KHz)	√			√			√	2	
CT9-M-W CT9-M-W-UV *	S	√ (no 125KHz)	√			√		√	√	1	√
CT9-M-W-2R CT9-M-W-2R-UV *	S	√ (no 125KHz)	√			√		√	√	2	
CT9-ME-T CT9-ME-T-UV *	S	√	√			√			√	1	√
CT9-ME-T-2R CT9-ME-T-2R-UV *	S	√	√			√			√	2	
CT9-ME-W CT9-ME-W-UV *	S	√	√			√		√	√	1	√
CT9-ME-W-2R CT9-ME-W-2R-UV *	S	√	√			√		√	√	2	
CT9-W-Q CT9-W-Q-UV *	L	√	√	√		√		√	√	1	√
CT9-W-Q-2R CT9-W-Q-2R-UV *	L	√	√	√		√		√	√	2	
CT9-W-P CT9-W-P-UV *	L	√	√		√	√		√	√	1	√
CT9-W-P-2R CT9-W-P-2R-UV *	L	√	√		√	√		√	√	2	
CT9-W-QP CT9-W-QP-UV *	L	√	√	√	√	√		√	√	1	√
CT9-W-QP-2R CT9-W-QP-2R-UV *	L	√	√	√	√	√		√	√	2	
CT9 PRO-W Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm

* The models with '-UV' are UV-resistance, ideal for outside door under strong UV ray.

CT9 PRO-W Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm
CT9-W-Q-M CT9-W-Q-M-UV *	L	√ (no 125KHz)	√	√		√		√	√	1	√
CT9-W-Q-M-2R CT9-W-Q-M-2R-UV *	L	√ (no 125KHz)	√	√		√		√	√	2	
CT9-T-Q CT9-T-Q-UV *	L	√	√	√		√			√	1	√
CT9-T-Q-2R CT9-T-Q-2R-UV *	L	√	√	√		√			√	2	
CT9-T-P CT9-T-P-UV *	L	√	√		√	√			√	1	√
CT9-T-P-2R CT9-T-P-2R-UV *	L	√	√		√	√			√	2	
CT9-T-QP CT9-T-QP-UV *	L	√	√	√	√	√			√	1	√
CT9-T-QP-2R CT9-T-QP-2R-UV *	L	√	√	√	√	√			√	2	
CT9-H CT9-H-UV *	L	√	√			√	√		√	1	√
CT9-H-2R CT9-H-2R-UV *	L	√	√			√	√		√	2	
CT9-H-Q CT9-H-Q-UV *	L	√	√	√		√	√		√	1	√
CT9-H-P CT9-H-P-UV *	L	√	√		√	√	√		√	1	√
CT9-H-P-2R CT9-H-P-2RUV *	L	√	√		√	√	√		√	2	
CT9-H-QP CT9-H-QP-UV *	L	√	√	√	√	√	√		√	1	√
CT9-HW CT9-HW-UV *	L	√	√			√	√	√	√	1	√
CT9-HW-2R CT9-HW-2R-UV *	L	√	√			√	√	√	√	2	
CT9 PRO-W Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm

* The models with '-UV' are UV-resistance, ideal for outside door under strong UV ray.

CT9 PRO-W Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm
CT9-HW-Q CT9-HW-Q-UV *	L	√	√	√		√	√	√	√	1	√
CT9-HW-P CT9-HW-P-UV *	L	√	√		√	√	√	√	√	1	√
CT9-HW-P-2R CT9-HW-P-2R-UV *	L	√	√		√	√	√	√	√	2	
CT9-HW-QP CT9-HW-QP-UV *	L	√	√	√	√	√	√	√	√	1	√
CT9 PRO-W Models	Case Model	RFID	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay	Fire alarm

* The models with '-UV' are UV-resistance, ideal for outside door under strong UV ray.

CT9 PRO-D Models Selection Guidance



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

Type: 3.5" Touch Screen

Model Name: CT9-X-X-(UV)-D
Case model: S



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

Type: 3.5" Touch Screen

Model Name: CT9-X-X-(UV)-D
Case model: L

CT9 PRO-D Models	Case model	HID® card technologies support	NFC/BLE	QR CODE	PoE	TCP/IP	4G	WiFi	RS485	Relay
CT9-T-D CT9-T-UV-D *	S	√	√			√			√	1
CT9-T-2R-D CT9-T-2R-UV-D *	S	√	√			√			√	2
CT9-W-D CT9-W-UV-D *	S	√	√			√		√	√	1
CT9-W-2R-D CT9-W-2R-UV-D *	S	√	√			√		√	√	2
CT9-T-Q-D CT9-T-Q-UV-D *	L	√	√	√		√			√	1
CT9-T-Q-2R-D CT9-T-Q-2R-UV-D *	L	√	√	√		√			√	2
CT9-H-D CT9-H-UV-D *	L	√	√			√	√		√	1
CT9-H-Q-D CT9-H-Q-UV-D *	L	√	√	√		√	√		√	1
CT9-W-Q-D CT9-W-Q-UV-D *	L	√	√	√		√		√	√	1
CT9-W-Q-2R-D CT9-W-Q-2R-UV-D *	L	√	√	√		√		√	√	2
CT9-HW-D CT9-HW-UV-D *	L	√	√			√	√	√	√	1
CT9-HW-Q-D CT9-HW-Q-UV-D *	L	√	√	√		√	√	√	√	1
CT9 PRO-D Models	Case model	HID® card technologies support	NFC/BLE	QR CODE	POE	TCP/IP	4G	WiFi	RS485	Relay

* The models with '-UV' are UV-resistance, ideal for outside door under strong UV ray.