

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

CT9 PRO 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 visitor access control management.

CT9 PRO 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 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.

## Features make your solution different and competitive

- 3.5" touch screen with customizable background image and real time message intuitive for visitor
- 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
- Support HID® Seos® and HID® iCLASS® smart card technologies
- Support RJ45 port and Power Over Ethernet(PoE) for less wiring and cost-save installation
- Support HTTP & HTTPS encrypted communication protocol
- Support both of local offline and online mode under server remote control in real time
- High-security access control system with indoor-mounted relay
- With inputs for external fire alarm system integration
- Cost effective customization service from hardware, software to firmware

## General Applications

CT9 PRO 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 & Payment

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



### IoT Facility Control

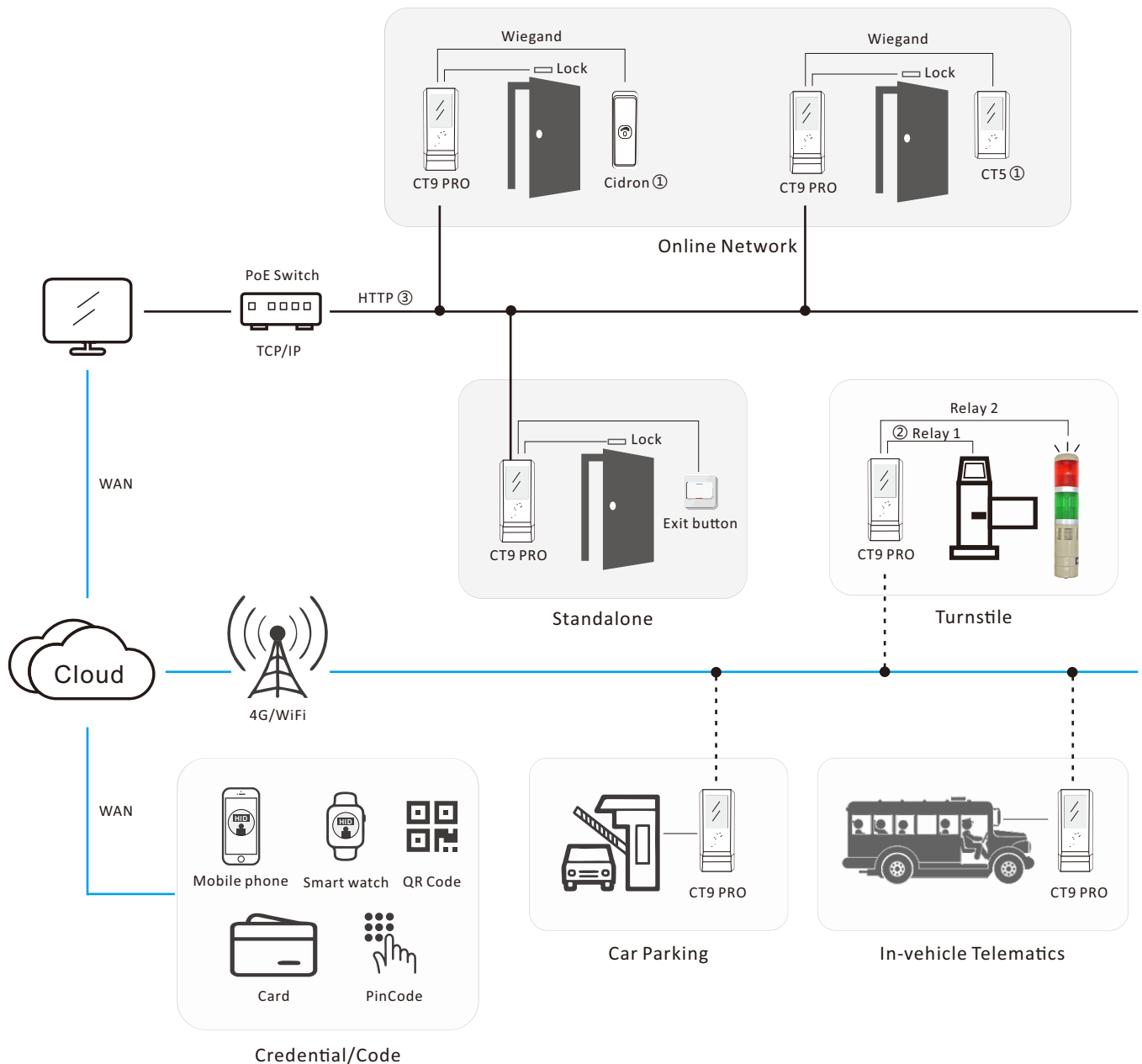
- Personal identification & equipment control
- Vehicle control
- Light control

## 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

# Configuration

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



## ① CT9 PRO Family APB Access Control Reader

With wiegand input, CT9 PRO Family 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.

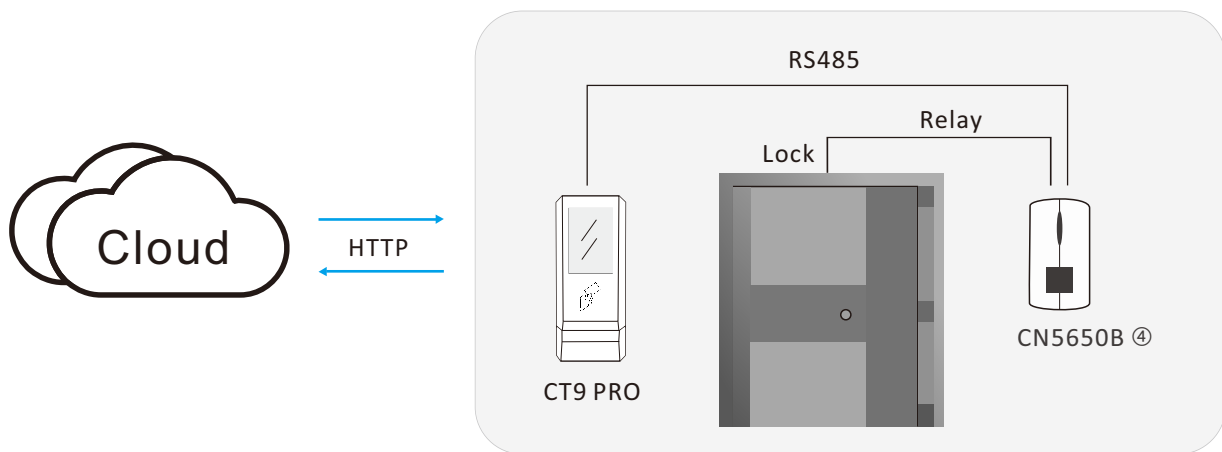
## ② CT9 PRO Family Dual Relay Outputs

With 2 relay outputs, CT9 PRO 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.

### ③ Flexible & easy management dual working modes

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

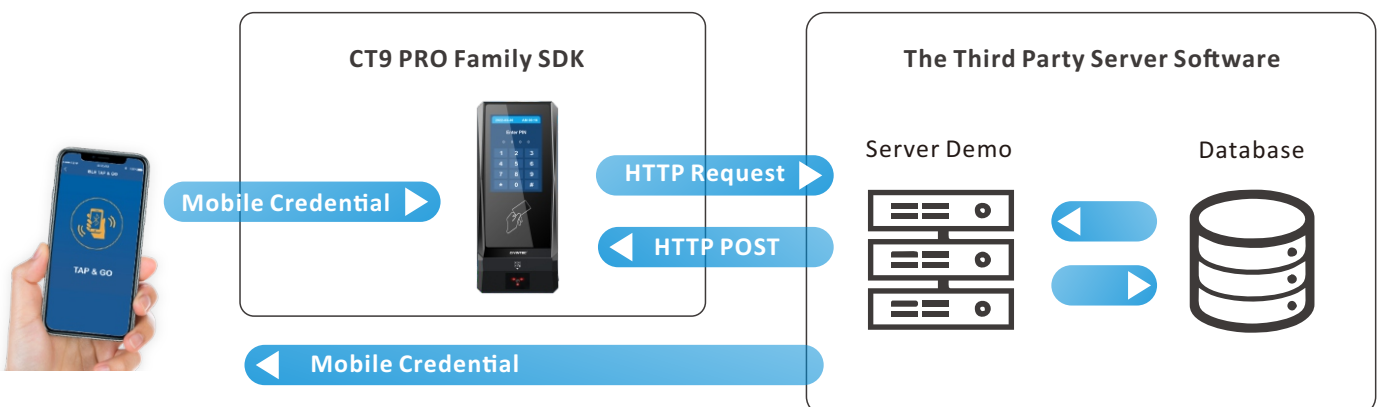
- For High-security access control environments as banking institutions, government buildings and data centers, CT9 family supports smart switching mode that can be configured to slave reader mode installed at entry points, seamlessly works with CN5650B relay-enabled card reader at interior exits.



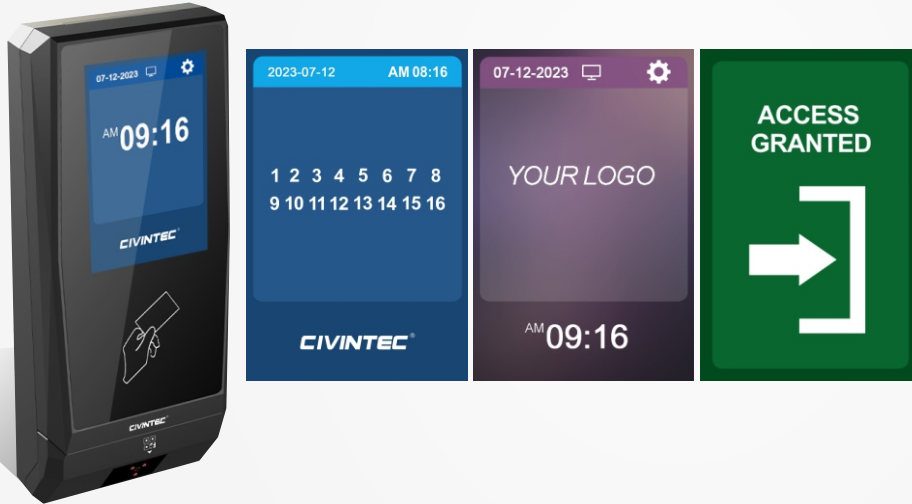
④ In this solution, CT9 family must be used in conjunction with CN5650B-4R-0C. Please Contact [sales@civintec.com](mailto:sales@civintec.com) for more information.

## For Developer

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



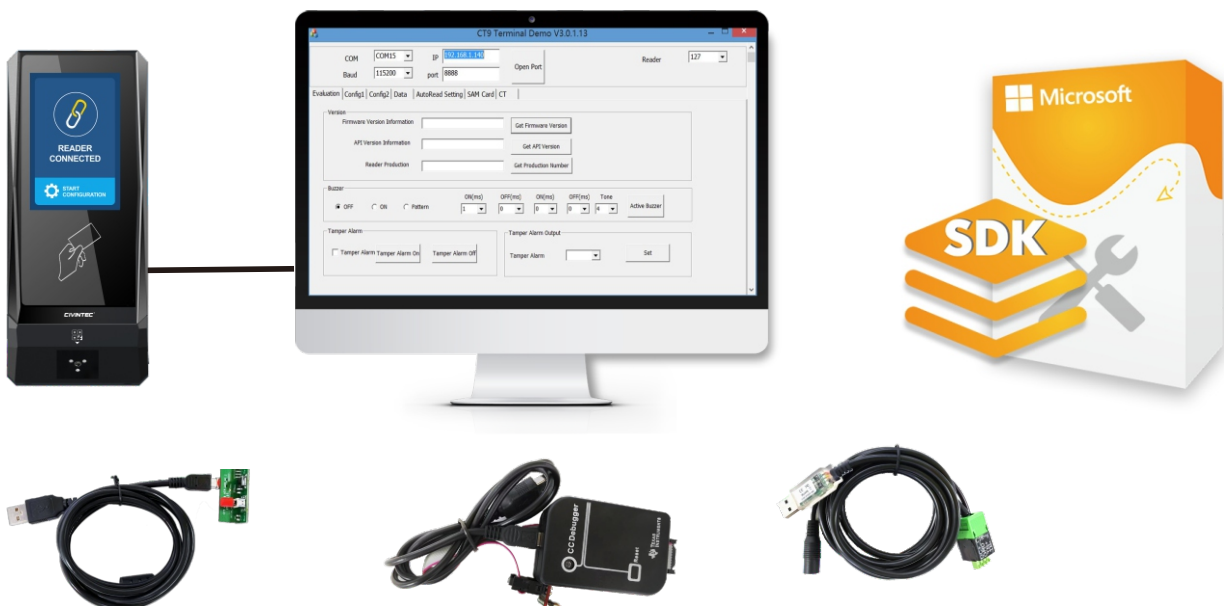
Developer is able to customize and display specific background image with TEXT information on 3.5" touch screen controlled by server via HTTP command for user to view the real time information, announcement.



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

#### • Hardware Testing Package and software development

HTP CT9 PRO Family 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 PRO	CT9 PRO	CT9 PRO-W	CT9 PRO-D
IDENTIFICATION TECHNOLOGIES			
RFID Contactless Cards	<ul style="list-style-type: none"><li>• 125KHz HID® PROX™, 125KHz EM</li><li>• 13.56MHz Mifare® Classic, Ultralight®, Mifare® Plus, DESFire® EV1/EV2/EV3, NFC tags</li></ul>	<ul style="list-style-type: none"><li>• 125KHz HID® PROX™, 125KHz EM</li><li>• 13.56MHz Mifare® Classic, Ultralight®, Mifare® Plus, DESFire® EV1/EV2/EV3, NFC tags</li></ul>	<ul style="list-style-type: none"><li>• 13.56MHz Mifare® Classic, Ultralight®, Mifare® Plus, NFC tags, DESFire® EV1/EV2/EV3; HID® iCLASS®, HID® Seos®</li><li>• 125KHz HID® PROX™, Indala, EM4100/4102 and HITAG</li></ul>
Secure Access Module	ISO7816 (T=0,T=1) 1 SAM module, SAM AV2/AV3	--	--
Mobile Credential	BLE (2.4Ghz), NFC	BLE (2.4Ghz), NFC	BLE (2.4Ghz), NFC and HID mobile virtual card
Barcode / QR scanner	<ul style="list-style-type: none"><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	Touch screen keypad 12 keypad in 4 rows of 3 keys		
INTERFACE			
Communication Interfaces	<ul style="list-style-type: none"><li>• TCP/IP(RJ45)</li><li>• 4G</li><li>• RS485, wiegand input</li></ul>	<ul style="list-style-type: none"><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>	<ul style="list-style-type: none"><li>• TCP/IP(RJ45)</li><li>• 4G</li><li>• WiFi 2.4GHz IEEE802.11b/g/n</li><li>• RS485, wiegand input</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 (relay for lock control function can be optional by indoor or outdoor control)		
Fire alarm	On request		
GENERAL			
Operating System	LINUX		
Display	3.5” touch screen		
Identification mode	Mobile Credential, QR Code, HID® / 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 style="list-style-type: none"><li>• TP display</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	<ul style="list-style-type: none"><li>• 12~ 24V DC</li><li>• PoE IEEE 802.3af</li></ul>	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 Models Selection Guidance



Housing Dimensions:  
24mm(D) \* 165mm(H) \* 84mm(W)  
Type: 3.5" Touch Screen  
Model Name: CT9-X-X  
Case model: S



Housing Dimensions:  
45mm(D)\*200mm(H)\*84mm(W)  
Type: 3.5" Touch Screen  
Model Name: CT9-X-X  
Case model: L

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

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

# 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
CT9-M-W	S	√ (no 125KHz)	√			√		√	√	1
CT9-M-W-UV *										
CT9-M-W-2R	S	√ (no 125KHz)	√			√		√	√	2
CT9-M-W-2R-UV *										
CT9-ME-W	S	√	√			√		√	√	1
CT9-ME-W-UV *										
CT9-ME-W-2R	S	√	√			√		√	√	2
CT9-ME-W-2R-UV *										
CT9-W-Q	L	√	√	√		√		√	√	1
CT9-W-Q-UV *										
CT9-W-Q-2R	L	√	√	√		√		√	√	2
CT9-W-Q-2R-UV *										
CT9-W-P	L	√	√		√	√		√	√	1
CT9-W-P-UV *										
CT9-W-P-2R	L	√	√		√	√		√	√	2
CT9-W-P-2R-UV *										
CT9-W-QP	L	√	√	√	√	√		√	√	1
CT9-W-QP-UV *										
CT9-W-QP-2R	L	√	√	√	√	√		√	√	2
CT9-W-QP-2R-UV *										
CT9-HW	L	√	√			√	√	√	√	1
CT9-HW-UV *										
CT9-HW-2R	L	√	√			√	√	√	√	2
CT9-HW-2R-UV *										
CT9-HW-Q	L	√	√	√		√	√	√	√	1
CT9-HW-Q-UV *										
CT9-HW-P	L	√	√		√	√	√	√	√	1
CT9-HW-P-UV *										
CT9 PRO-W Models	Case model	RFID	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.



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

# 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 'L-UV' are UV-resistance, ideal for outside door under strong UV ray.