

CT10 NEW

Innovation, Secure, Reliable
4 IN 1 Access Control Terminal
VoIP Intercom and Camera



NFC/BLE



RFID card



QR Code



Pincode



Overview

CT10 intelligent access control and VoIP intercom terminal with camera incorporates 4-factors of authentication that encompasses, BLE and NFC mobile credentials, dual-frequency RFID smart cards, QR/barcode scanning, and touch keypad input. This multi-methods approach enables truly contactless access while maintaining advanced security standards for both regular users and visitors.

The Linux-based access control terminal is designed as server centralized system, supporting multiple connectivity options including Ethernet, 4G(GPS), WiFi, and LoRaWAN for real-time online monitoring in HOST mode or fully autonomous operation in standalone Local mode, guaranteeing uninterrupted access control.

Furthermore, Linux based CT10 is supported by a robust SDK with comprehensive libraries, API, encrypted high secure HTTPs protocol and DEMO for developer to rapidly build highly customer's own professional and strong applications and requirements tailored to diverse industry needs. It also provides API for developer to display customized and intuitive UI, background image and real-time TEXT on 3.5" touchscreen. CT10 SDK provides developers with a simple, user-friendly interface, offering high flexibility and extensibility.

Support Multiple Authentication Technologies

CT10 supports multiple access control credential options secured by advanced encryption. Security can be further enhanced with 4-factor authentication method by combining mobile App with digital credentials.



QR Code



Mobile Credential



RFID Smart Card



Pincode

Access Control with VoIP Intercom

By integrating VoIP intercom functionality directly into access control system, CT10 creates a unified security platform by utilizing the RTSP for real-time communication across all doors, which delivers an essential layer of identity verification and physical protection.



Auto Image Record Notifications

To enhance security and simplify management, CT10 intelligent access control terminal integrates a high-resolution camera to add a vital visual layer to every entry event. Each time a credential is used, the terminal automatically captures a timestamped image upon access. This visual record is then seamlessly synced to the server in real-time or saved locally, providing a clear audit trail.

4G + GPS Enabled for Outdoor Reliability

CT10 features embedded 4G LTE and GPS technology, designed for reliable outdoor and mobile applications. This rugged IP65-rated system ensures continuous connectivity without WiFi or Ethernet cable dependency, while its GPS capability provides essential location verification - perfect for construction sites, mobile assets, campsite and remote facilities.



Features



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



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 CN56X0B reader to achieve indoor-mounted relay controlling door lock for high security



Access Control Toggle Function

CT10 toggle function allows instant door status switching between locked mode (no access), unlocked mode (free access), and normal access control mode (validates permissions) with a HTTP/HTTPS command from cloud server.



Rich I/O port

CT10 is with embedded 1~2 Relay output design for lock and facility control and input for Fire Alarm system integration



4G + GPS Enabled for Outdoor Reliability

The CT10 revolutionizes access control with built-in 4G LTE connectivity and GPS capability, delivering enterprise-grade security anywhere

Applications

CT10 server based networked IoT & access control terminal is perfect to meet general applications and industries. It provides server-based centralized remote applications control in real time, to control various kinds of electronic lock, turnstile, barrier and facilities. It supports multiple authentication technologies for staff, student, resident, visitor and member management and tracking. With 3.5" touch screen, CT10 is intuitive for visitors to read the status of access granted/denied, function keys, reservation, displayed information or announcements in real time.



Access Control



Time Attendance



Loyalty & Payment



IoT Facility Control

Industries

- | | | | |
|----------------------------|-----------------------------|----------------------------|---------------------|
| • Campus & School | • Car Parking | • Healthcare | • Stadiums & Venues |
| • Enterprise | • Government | • Workforce | • Retail |
| • Hospitality | • Industrial Access Control | • Gym & Fitness Facilities | • Restaurants |
| • Multi-Family Residential | • Construction | • Sport Court | • Warehouses |
| • Storage | • Data Center | | |

Configuration

- **Centralized Network Management**

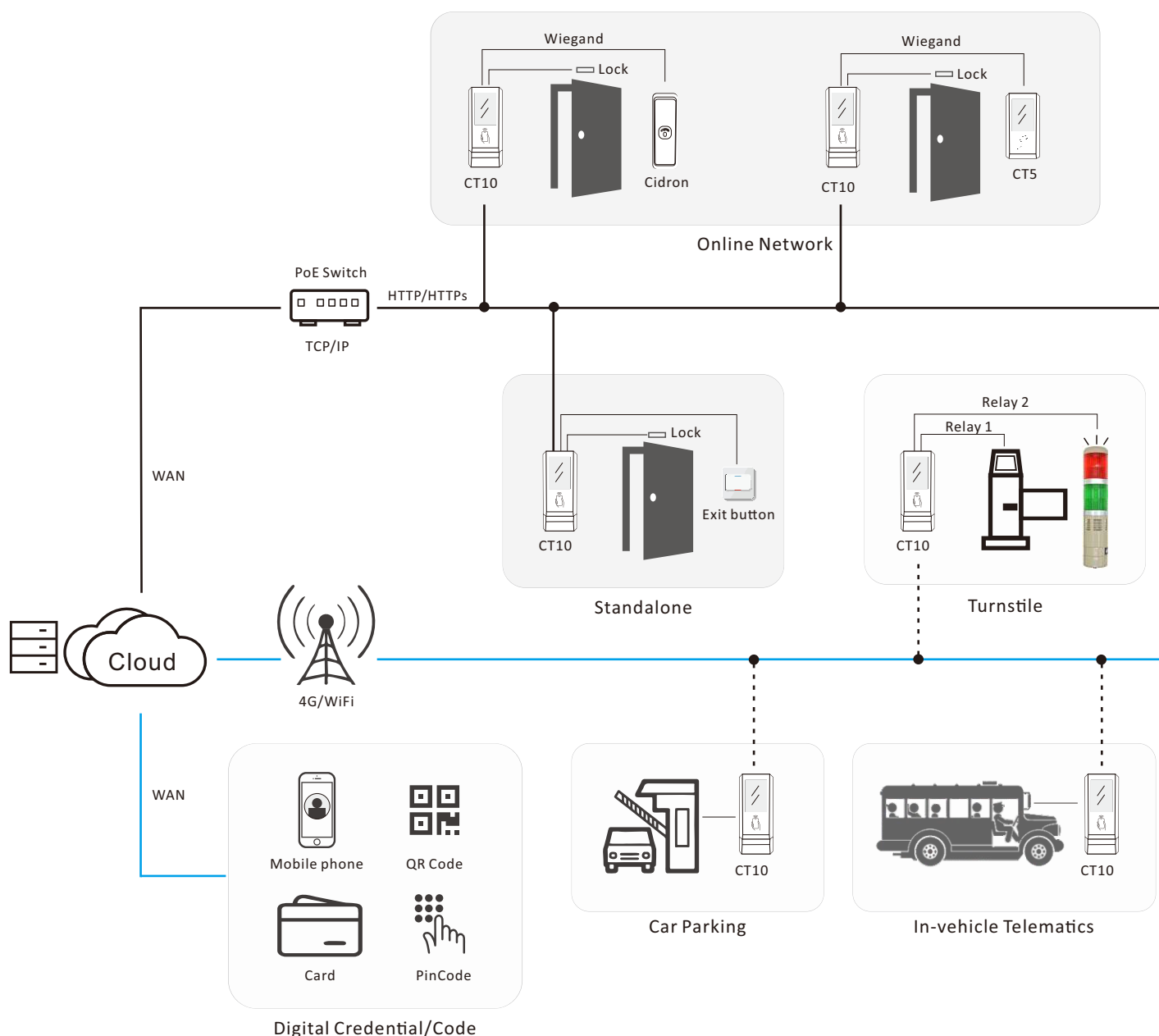
CT10 is networked access control system that operates over TCP/IP, with optional WiFi, LoRaWAN, or 4G connectivity to manage both online and local mode access control applications. This ensures seamless operation in any environment, even those with limited or no local network access.

- **High-Security Access Solution Tailored for Critical Areas**

CT10 supports APB reader to protect both sides of an access point. It can be intelligently configured into a slave mode for entrances, while operating seamlessly with room interior CN56X0B relay-enabled card readers for exits.

- **Intelligent Access and Facility Control**

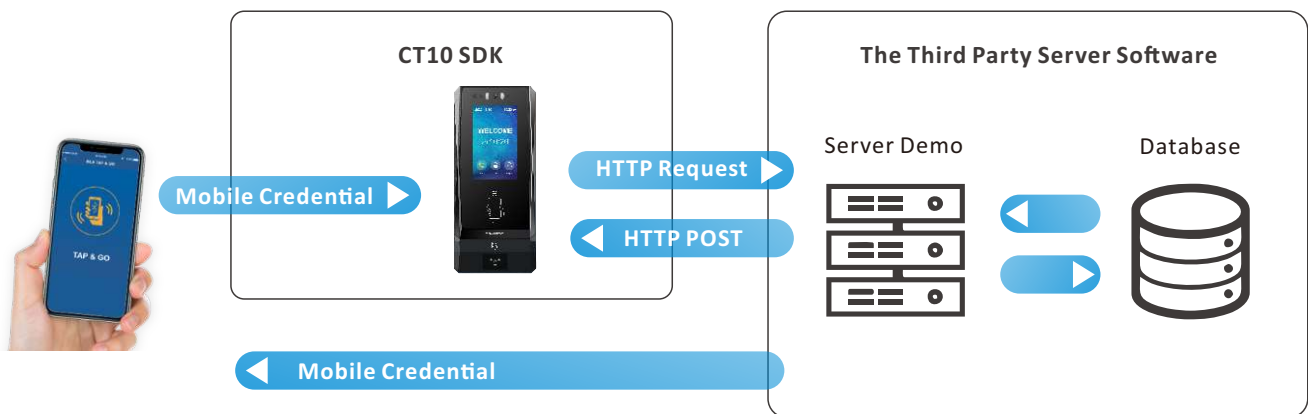
Equipped with two relay outputs, CT10 smart IoT & access control system is ideal for centralized remote management of electric locks, lighting, and other facilities from a central server in real time.



For Developer

CT10 provides SDK for customer's software development or the third party software system integration for general applications build. CT10 SDK offers developer guidance, libraries, API, HTTP/HTTPS protocol, alongside ConfigCard software, robust demo software including BLE, NFC and QR credentials, server demo and rich example codes to greatly accelerate software development. HTTP and encrypted HTTPS protocols are provided for developer to establish communication between CT10 and user's server software high security and stability.

With its extensive API library, developers can effortlessly build customized solutions tailored to unique application across industries- from corporate offices to industrial facilities. The SDK further empowers developers to fully customize intuitive UI interfaces, display branded backgrounds, and present real-time text information on the 3.5-inch touch screen. This flexibility facilitates a tailored user experience and ensures a unified brand presence.



Hardware Testing package and Configuration software

CT10 supply HTP - plug & play hardware testing package for developer. It includes Configcard software and all the must-have accessories to establish full testing environment for terminal test, full functions configuration, software development and firmware/system upgrading.



Specifications

	CT10
IDENTIFICATION	
RFID	• 125KHz HID® PROX™, 125KHz EM • 13.56MHz Mifare®Classic, Ultralight®, Mifare®Plus, DESFire®EV1/EV2/EV3, NFC tags
Mobile Credential	BLE, NFC (<i>Support BLE in iOS, and NFC/BLE in Android</i>)
	QR Code Multiple formats supported (<i>1D & 2D Codes</i>):QR Code, Micro QR code, PDF417, Code 128, Code 39 and most mainstream 1D and 2D barcodes.
Keypad	Supported
CAPACITY	
Max. Card Users	• Local mode: 100,000 users • Online mode: Unlimited
Max. Event logs	• Local mode: 200,000 logs (<i>more on request</i>) • Online mode: Unlimited
Max. Image Logs	• Local mode: 7000 logs
GENERAL	
Operating System	LINUX OS
Display	3.5" touch screen (<i>Resistant to UV ray</i>)
LCD Resolution	480*800 Pixels
Camera	2MP camera with Autofocus and LED Flash
Audio	High-quality sound Speaker
Intercom	VoIP
Indicator	• TP Display • Controllable buzzer and speaker
INTERFACE	
Ethernet	TCP/IP(RJ45)
WiFi	2.4GHz IEEE802.11 b/g/n (<i>suitable for CT10-W-XX model</i>)
LoRaWAN	Supported Operating Frequency:860~930MHz (<i>suitable for CT10-L-XX model</i>)
4G	4G LTE + GPS Supported (<i>suitable for CT10-H-XX model</i>)
Network Protocol	HTTP/HTTPs
BLE	BLE 5.3
RS485	Supported
Wiegand	1* wiegand input (<i>26-1024bit</i>)
I/O port	3*Inputs - Door contact, Door exit, Buzzer control 4*Outputs - Tamper alarm switch, Output buzzer control, Access Granted, Access Denied
Relay	1~2 relay outputs
Fire alarm	Support fire alarm signal input

INSTALLATION	
Power Supply	• DC 12~24V • PoE IEEE802.3af
Dimensions	47.7mm(D)*198mm(H)*83.6mm(W)
Protection Rating	• IP65 electric epoxy potted • Resistant to UV ray
Impact Protection	IK07
Operation Temperature	-20~60 °C
Upgrade	Software and firmware upgrade supported

* The specifications are subject to change without notice.

• CT10 Model Selection Guide

CT10-XX-XX-X-UV

Relay Numbers

2R - 2 relay outputs
Blank - 1 relay output

Functions

Q - Embedded QR scanner
P - Power Over Ethernet(PoE)
QP - QR scanner + POE
Blank - no functionality

Communication Interface

Blank - TCP/IP
H - 4G LTE + TCP/IP
W - WiFi + TCP/IP
L - LoRaWAN + TCP/IP
HW - 4G LTE + WiFi + TCP/IP
LW - LoRaWAN + WiFi + TCP/IP

• Go to online shop, choose your model, and get a quote.

CT10

3.5" touch screen access control terminal with reader

Identifications

Communication Interface

Power

Protection

Relay

[Clear selection](#)

[Go to online shop to Get Quote](#)



CT10 Models Selection Guidance



Housing Dimensions:

47.7mm(D) * 198mm(H) * 83.6mm(W)

Type: 3.5" Touch Screen

Model Name: CT10-XX-XX-UV

CT10 Models	RFID	NFC/BLE	QR Code	PoE	TCP/IP	WiFi	4G	Relay
CT10-ME-UV	✓	✓			✓			1
CT10-ME-2R-UV	✓	✓			✓			2
CT10-P-UV	✓	✓		✓	✓			1

CT10 Models	RFID	NFC/BLE	QR Code	PoE	TCP/IP	WiFi	4G	Relay
CT10-P-2R-UV	✓	✓		✓	✓			2
CT10-Q-UV	✓	✓	✓		✓			1
CT10-Q-2R-UV	✓	✓	✓		✓			2
CT10-QP-UV	✓	✓	✓	✓	✓			1
CT10-QP-2R-UV	✓	✓	✓	✓	✓			2
CT10-W-UV	✓	✓			✓	✓		1
CT10-W-2R-UV	✓	✓			✓	✓		2
CT10-W-P-UV	✓	✓		✓	✓	✓		1
CT10-W-P-2R-UV	✓	✓		✓	✓	✓		2
CT10-W-Q-UV	✓	✓	✓		✓	✓		1
CT10-W-Q-2R-UV	✓	✓	✓		✓	✓		2
CT10-W-QP-UV	✓	✓	✓	✓	✓	✓		1
CT10-W-QP-2R-UV	✓	✓	✓	✓	✓	✓		2
CT10-H-UV	✓	✓			✓		✓	1
CT10-H-2R-UV	✓	✓			✓		✓	2
CT10-H-P-UV	✓	✓		✓	✓		✓	1
CT10-H-P-2R-UV	✓	✓		✓	✓		✓	2
CT10-H-Q-UV	✓	✓	✓		✓		✓	1
CT10-H-Q-2R-UV	✓	✓	✓		✓		✓	2
CT10-H-QP-UV	✓	✓	✓	✓	✓		✓	1
CT10-H-QP-2R-UV	✓	✓	✓	✓	✓		✓	2
CT10-HW-UV	✓	✓			✓	✓	✓	1
CT10-HW-2R-UV	✓	✓			✓	✓	✓	2
CT10-HW-P-UV	✓	✓		✓	✓	✓	✓	1
CT10-HW-P-2R-UV	✓	✓		✓	✓	✓	✓	2
CT10-HW-Q-UV	✓	✓	✓		✓	✓	✓	1
CT10-HW-Q-2R-UV	✓	✓	✓		✓	✓	✓	2
CT10-HW-QP-UV	✓	✓	✓	✓	✓	✓	✓	1
CT10-HW-QP-2R-UV	✓	✓	✓	✓	✓	✓	✓	2
CT10 Models	RFID	NFC/BLE	QR Code	PoE	TCP/IP	WiFi	4G	Relay