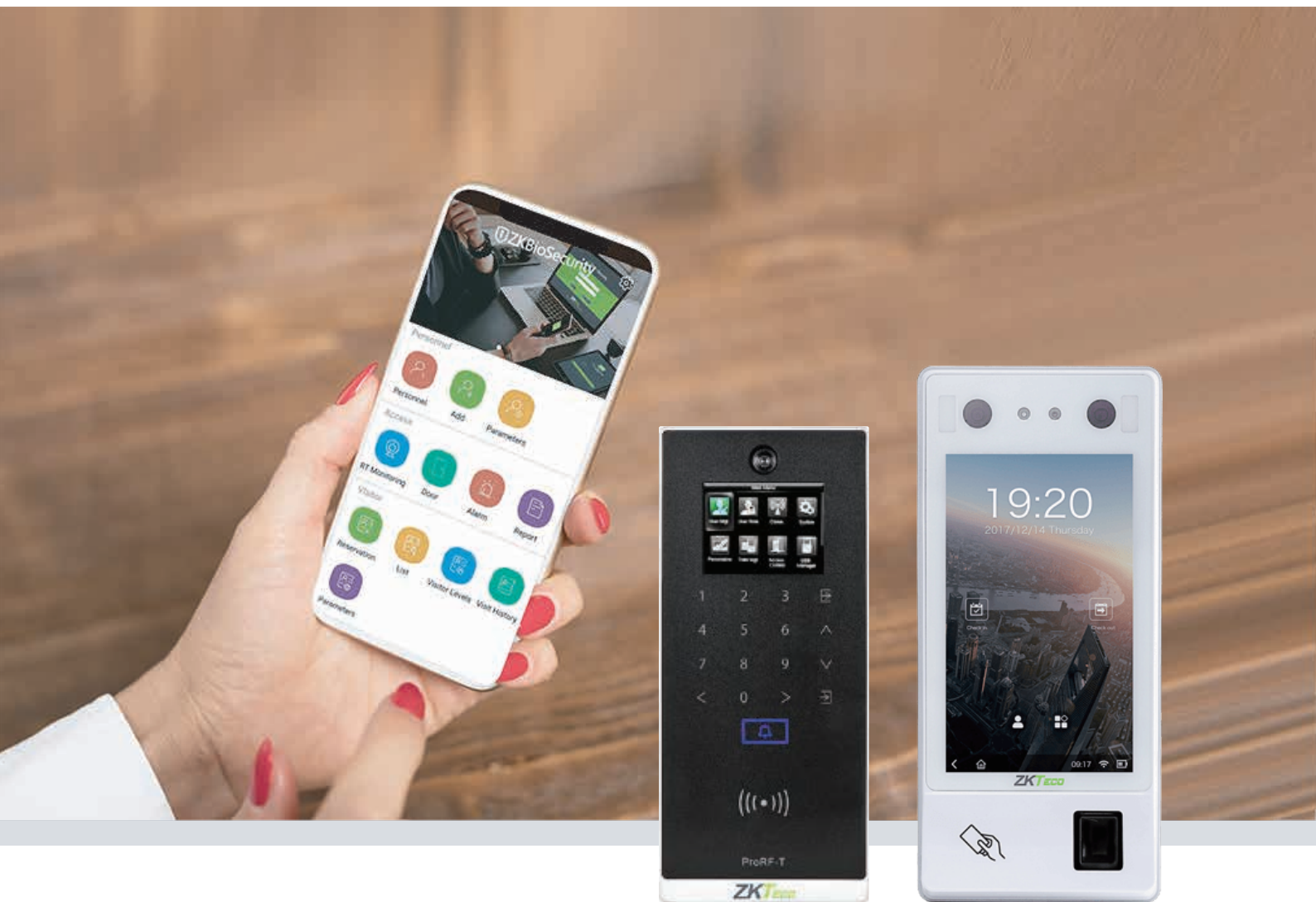


Mobile Access Control Solution



Introduction

Mobile access control solution offers a new method of access with just simply with mobile devices like smart phone, tablets etc. With NFC or Bluetooth technology, it enables high cost efficiency of access control management of identification function access points that can definitely replace conventional physical RFID card.



FaceKiosk-H13C(TD)



FaceKiosk-32T



FaceKiosk-H13A(TD)



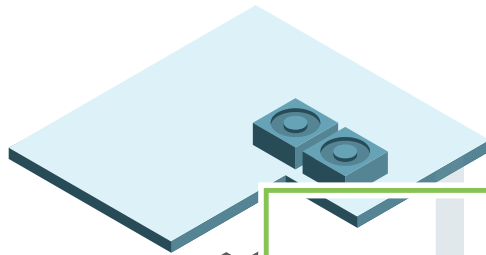
ProRF-T



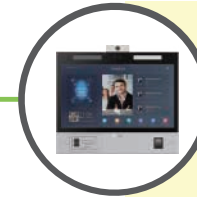
G4



Mobile Access Control Solution



- ProRF-T**
RFID Access Control Terminal
- Modern Design & Interactive UI
 - Simple Management & Scalability
 - Multiple Verification Modes: Card / Password
 - Support NFC or Bluetooth technology
 - Built In Camera:Event Snapshot and User Photo



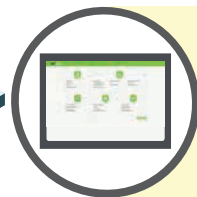
- FaceKiosk H13A(TD)**
13.3-inch touch-screen multi-purpose facial recognition smart device with Android system
- Proactive Facial Recognition
 - Wide Pose Angle Acceptance
 - Enhanced Visible Light Facial Recognition
 - Multiple Verifications: Face/ FingerPrint/ Card
 - Support NFC or Bluetooth technology
 - Speedy Recognition



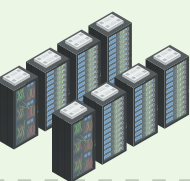
- G4**
Multi-Biometric Identification Terminal
- Revolutionary SilkID Fingerprint Sensor
 - Proactive Facial Recognition
 - Wide Pose Angle Acceptance
 - Enhanced Visible Light Facial Recognition
 - Multiple Verifications: Face/ FingerPrint/ Card/ Password
 - Support NFC or Bluetooth technology
 - Speedy Recognition



- FaceKiosk-H13C(TD)**
Android Multipurpose Facial Recognition Kiosk with Temperature & Mask Detection Module
- Proactive Facial Recognition
 - Support MF Module, Fingerprint, Ticket Printer & QR Code Scanner
 - Support Temperature Detection Module
 - Support NFC or Bluetooth technology
 - Speedy Recognition



- ZKBioSecurity**
Professional Security Software
- All-In-One solution
 - Simple Structure and Smooth Workflow
 - Multi-door Management Capacity (Up to 2,000 doors in Single Server and unlimited doors in Multi-Server)



ZKBioSecurity
Server



USA Office



Australia Office



France Office

What is a mobile access control system?

As user friendliness and convenience of user experience are more emphasized than ever, ZKTeco's access control devices accept mobile devices like smartphone, tablet as RFID card to access to specific secured areas, offices and other business facilities. It enables enterprises to have comprehensive identity authentication in access points without having to purchase expensive biometric readers.



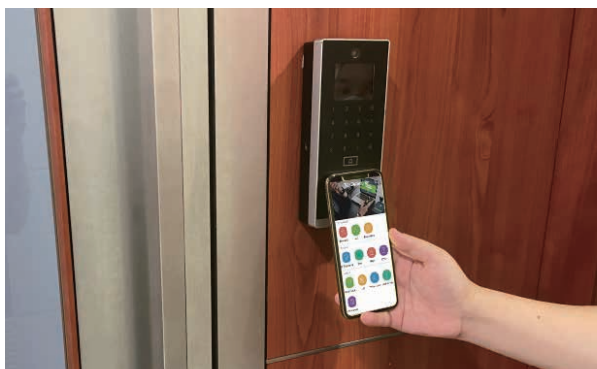
How does mobile access control work?

In the past, access control is generally operated with physical RFID technology, users swipe their cards to get in. ZKTeco Access control solution is powered by NFC and Bluetooth technology, with our app installed on the mobile devices, it enables users to open a door with their smartphones and tablets.

ZKTeco's access control solution includes

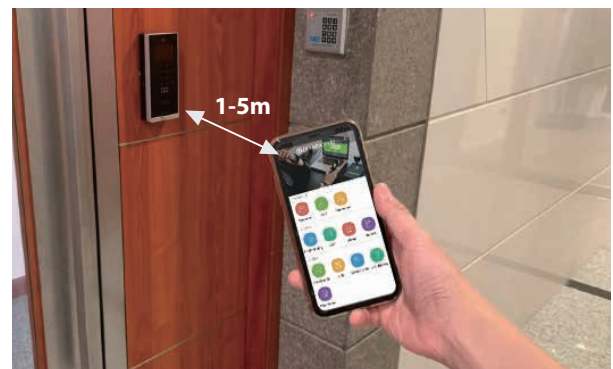
- "Bluetooth Low Energy (BLE) technology"
- "NFC (Near field communication) technology"

No matter you are iOS or Android user, enjoy the good experience with ZKTeco mobile access control device.



NFC (Near field communication) technology

Users need to tap the NFC-enabled device to a reader to obtain access rights.



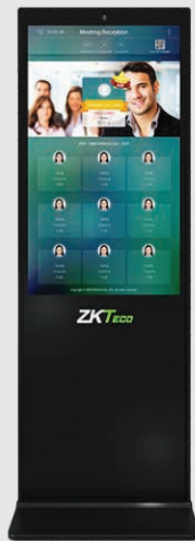
Bluetooth Low Energy (BLE) technology

The phone can interact with an AC reader from long distance to grant access.

Remark: BLE stands for Bluetooth Low Energy. It uses the location of the emitter to match ZKTeco readers. You can also switch off Bluetooth and use NFC for accessing controlled areas.



FaceKiosk-H13C[TD]



FaceKiosk-32T



FaceKiosk-H13A[TD]



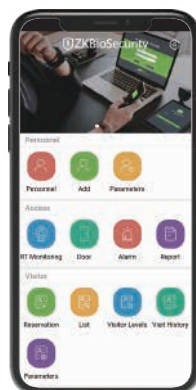
ProRF-T



G4

What is ZKTeco Multi-Tech RFID Technology?

ZKTeco perfectly integrates ELATEC modules into time & attendance and access control products. The RFID reader with ELATEC module offers a vast array of capability and is adaptable in so many diverse industries and fulfils different purposes. ELATEC Multi-Tech RFID module integrates RFID (125kHz, 134.2kHz, and 13.56MHz) and NFC capabilities, enabling users to read and write almost all common 125kHz, 134.2kHz and 13.56MHz tags and/or labels worldwide. The module supports all major transponders from various suppliers like ATMEL, EM, ST, NXP, TI, HID, LEGIC, and ISO standards like ISO14443A/B (T=CL), ISO15693, ISO18092 / ECMA-340 (NFC). With the ZKBioSecurity application, which allows mobile access with NFC & BLE, users may use their smartphones as the RFID card to obtain access rights and/or take attendance on a time & attendance device.

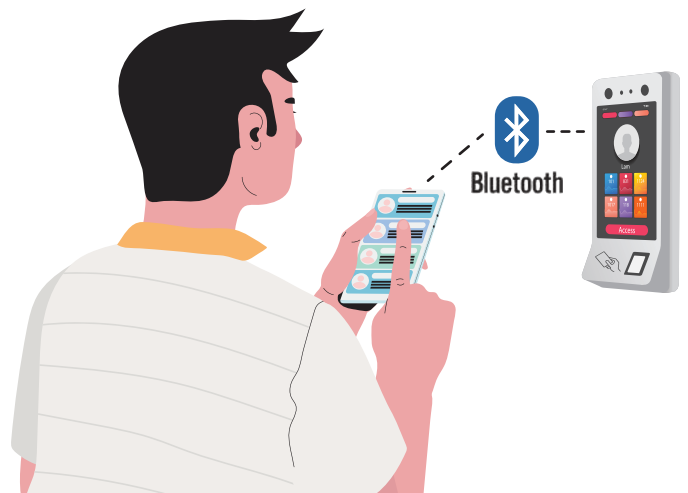


Bluetooth Low Energy (BLE)

Bluetooth Low Energy (BLE)

Bluetooth Low Energy (BLE) technology is a wireless personal area network technology, which can be established from the distance of long-range wireless connectivity.

With regards to mobile access control solutions, user can rely on the BLE technology to enable smart phone to have a connection with the remote access control, for those low energy of BLE also allows access control terminal to communicate with remote users without the hassles pairing.

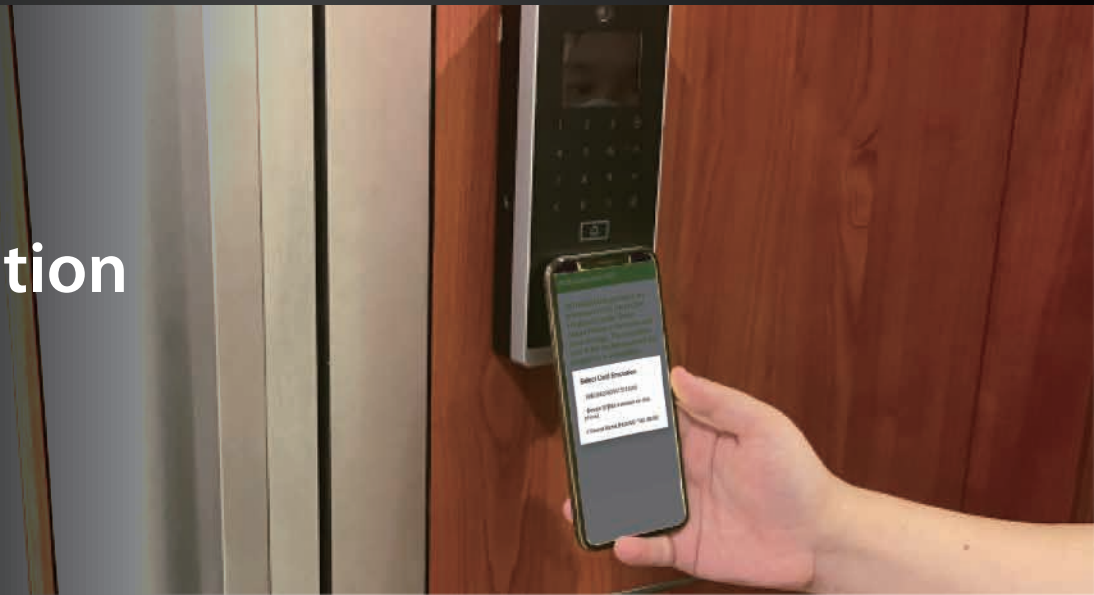


Long Distance usage of Bluetooth Low Energy (BLE)

It provides a long range of communication between access control and remote user, with 1-5m, door can be unlocked effortlessly with this Bluetooth low energy technology.



Near Field Communication (NFC)



Near Field Communication (NFC)

NFC (Near field communication) technology is a short-range wireless connectivity technology, with a few inches' distances, user can get their devices paired and connected to the access control system.

With the integration to mobile access control, user can rely on the NFC technology to set up a communication between access control and smart mobile. Due to the short limitation range of the NFC communication, users need to tap the NFC-enabled device to a reader to obtain access rights.



Module Support List

Access Control Terminal	BLE APP	NFC APP	ELATEC Module Name	Supported Card Format	Supported Frequency
G4 ProRF-T FaceKiosk-H13V[TD] Facekorisk-32VT FaceKiosk-H13A FaceKiosk-H13A[TD] FaceKiosk-H13C FaceKiosk-H13V[TD] FaceKiosk-32VT	N/A	Y	MTR	ID MF DESFire EV1 DESFire EV2 LEGIC	125 kHz 134.2 kHz (LF) 13.56 MHz (HF)
G4 ProRF-T FaceKiosk-H13V[TD] Facekorisk-32VT FaceKiosk-H13A FaceKiosk-H13A[TD] FaceKiosk-H13C FaceKiosk-H13V[TD] FaceKiosk-32VT	N/A	Y	MTR-H	ID MF DESFire EV1 DESFire EV2 LEGIC HID Proxy	125 kHz 134.2 kHz (LF) 13.56 MHz (HF)
IN05 G4 ProRF-T FaceKiosk-H13V[TD] Facekorisk-32VT FaceKiosk-H13A FaceKiosk-H13A[TD] FaceKiosk-H13C FaceKiosk-H13V[TD] FaceKiosk-32VT	N/A	Y	MTR-Hi	ID MF DESFire EV1 DESFire EV2 LEGIC HID Proxy HID iCLASS	125 kHz 134.2 kHz (LF) 13.56 MHz (HF)
ProRF-T	Y	Y	MTB	ID MF DESFire EV1 DESFire EV2 LEGIC	125 kHz 134.2 kHz (LF) 13.56 MHz (HF) 2402 MHz - 2480 MHz (BT)
ProRF-T	Y	Y	MTB-H	ID MF DESFire EV1 DESFire EV3 HID Proxy LEGIC	125 kHz 134.2 kHz (LF) 13.56 MHz (HF) 2402 MHz - 2480 MHz (BT)
ProRF-T	Y	Y	MTB-Hi	ID MF DESFire EV1 DESFire EV4 HID Proxy HID iCLASS LEGIC	125 kHz 134.2 kHz (LF) 13.56 MHz (HF) 2402 MHz - 2480 MHz (BT)

ELATEC

RFID Systems



ELATEC Module Specifications

Frequency	125 kHz/134.2 kHz (LF) / 13.56 MHz (HF) / 2402 MHz - 2480 MHz (BT)
READ- / WRITE Distance	LF and HF: Up to 100 mm / 4 inch, depending on environment and transponder / BT (at least 1m, max 5m)
Bluetooth Low Energy	Bluetooth V4.1
ISO14443A	LEGIC Advant 1), MIFARE Classic 1k & 4k EV1 2), MIFARE Classic, MIFARE Mini, MIFARE DESFire EV1, MIFARE DESFire EV2 2), MIFARE Plus S, X, MIFARE Pro X 3), MIFARE Smart MX 3), MIFARE Ultralight, MIFARE Ultralight C, MIFARE Ultralight EV1, NTAG2xx, PayPass 3) , SLE44R35, SLE66Rxx (my-d move) 3) , Topaz
ISO14443B	Calypso 3) , Calypso Innovatron protocol 3) , CEPAS 3) , HID iCLASS 1) , Moneo 3) , Pico Pass 4) , SRI4K, SRIX4K, SRI512, SRT512
ISO18092 ECMA-340	NFC Forum Tag 1-5, NFC Peer-to-Peer, Sony FeliCa 5) , NFC Active and passive
ISO15693	EM4x33 3) , EM4x35 3) , HID iCLASS 1) , HID iCLASS SE/SR 1) , ICODE SLI, LEGIC Advant 1) , M24LR16/64, MB89R118/119, SRF55Vxx (my-d vicinity) 3) , Tag-it, PicoPass 4) 125 kHz, 134.2 kHz: AWID, Cardax, CASI-RUSCO, Deister 6) , EM4100, 4102, 4200 7) , EM4050, 4150, 4450, 4550, EM4305 8) , FDX-B, EM4105, HITAG 1 9) , HITAG 2 9) , HITAG S 9) , ICT 8) , IDTECK, Isonas 8) , Keri, Miro, Nedap 6) , PAC, Pyramid, Q5, T5557, T5567, T5577, TIRIS/HDX, TITAN (EM4050), UNIQUE, ZODIAC
HID 125KHz	HID DuoProx II, HID ISO Prox II, HID Micro Prox, HID ProxKey III, HID Prox, HID Prox II, Indala, ioProx, Nexwatch
HID 135.56MHz	HID iCLASS 10), HID iCLASS SE/SR/SEOS (CSN and Facility Code/PAC) 10), HID iCLASS Elite & SE Elite
Data encryption	NFC & BLE support AES 128 encryption
Device List	G4, ProRF-T, FaceKiosk-H13V[TD], FaceKiosk-32VT, FaceKiosk-H13A, FaceKiosk-H13A[TD], FaceKiosk-H13C, FaceKiosk-H13V[TD], FaceKiosk-32VT, IN05

