



COMPANY PRESENTATION

ZKT *TECO*

IDENTITY PROTECTION

010011000010 01000111
00101110101000011110
1101000010 10111100

IDENTITY PROTECTION

Name: _____
Password: _____
00000000 00000000 00100111
00000000 00000000 00000000

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About ZKTeco

— Introduction, Scale, History, Honor, Value, Mission, Partner —



ZKTeco at A Glance

ZKTECO CO., LTD. (ZKTeco) (301330: CN Shenzhen Stock Exchange) is an internationally renowned enterprise which specializes in pioneering biometric recognition techniques.

ZKTeco dedicates itself in the three industries including:

- Smart Identity Authentication Application
- Smart Entrance Control Application
- Smart Office Application

ZKTeco provides total services to the users of global public services, enterprise-level users and personal users.

ZKTeco offers services on all fronts to public-service, enterprise-level and personal users.

Software platforms such as ZKBioSecurity, ZKBio Time, etc., which are widely used in:



Business



Government



Smart City



Hospital

...

ZKTeco Expansion

Since its establishment, ZKTeco has flourished and established **subsidiaries** in many Countries/Regions ,such as:



America



Argentina



Brazil



Chile



China



Colombia



Dubai



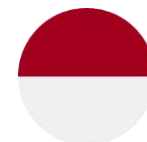
Germany



Hong Kong, China



India



Indonesia



Ireland



Italy



Kenya



Korea



Malaysia



Mexico



Nigeria



Panama



Thailand



Turkey



Peru



Singapore



South Africa



Spain



UK

ZKTeco Development



1998-2002

The founding team successively launched independently developed fingerprint recognition algorithms and embedded fingerprint recognition systems, and initiated the study of the applications of face recognition algorithm and fingerprint recognition technology in ID card.



2003-2006

The founding team successfully launched the facial recognition algorithm, and continued to upgrade the embedded fingerprint development platform and facial recognition algorithm.



2007

ZKTeco was officially founded and started venturing into the international market.



2011

Finger Vein Algorithm and Hybrid Biometrics Algorithm were launched.



2013

Multimodal palm recognition algorithm was launched.



2015

Released visible light facial recognition algorithm and palm recognition algorithm. Launched ZKBioSecurity and other time and security management platforms.

ZKTeco Development



2016

Released the upgraded versions of visible light facial recognition algorithm and multi-modal recognition algorithm.



2017

Released the intelligent license plate recognition system and smart visual perception system. Fingerprint collector obtained international certification.



2018

Released visible light face & fingerprint multi-modal recognition technique, ID card verification series technique, and license plate recognition algorithm for multiple countries including Thailand.



2019

Multi-modal biometric algorithm upgrade; won the honor of China's public safety product brand - top ten import and export control brands and other honors

Upgraded multi-modal biometrics algorithm.

Selected as the China Public Safety Product Brand – Top 10 Entrance & Exit Control Brands.



2020

Introduced institutional investors such as Walden International and Oriental Fortune Capital. Carried out technical research and released anti-epidemic products, multi-modal palm, fingerprint, and face hybrid recognition technologies. Ranked 13th in the 2021 Global Security 50 List by asmag.



2021

Released a new version of the multi-spectral large-capacity facial algorithm that supports mask recognition scenarios, the new version of the visible light palm algorithm, the anti-glare QR code recognition technology and the epidemic prevention health code scheme, and the new version of the iris face multi-modal recognition algorithm.

Honors

ZKTeco has been earning global recognitions and has been selected by a&s Magazine as one of the “Top 50 Global Security Companies 2021” and is ranked Top 13 Globally.

TOP 6

Multiple Product Group

TOP 13

Global Security Companies



ZKTeco is honoured by being selected as the “Top 10 HRMS Solution Providers 2019” by HR Tech Outlook, and “Top 30 Technology Innovations 2019” by Security Sales & Integration.

In 2015, ZKTeco was awarded “ESX Innovation Awards” in the Electronic Security Expo 2015



(Other awards ZKTeco won)

Certificates



- Radiation Safety License
- ISO9001/ISO9000: Quality Management System Certification
- ISO14001: Environmental Management System Certification
- ISO27001: Information Security Management System Certification

SAC/TC100/SC2
Standardization Technic
Committee for Security &
Protection Alarm Systems



NITS/SC37
National Information
Security Standardization
Technical Committee.



Mission & Value

To construct “car + person + object” entrance & exit sensing connector and smart application date empowerment services based on hybrid biometric verification techniques.



Responsibility

Responsibility is a major indicator for ZKTeco to measure individual spiritual quality, which penetrates our mutual commitment to customers, partners, employees and shareholders.



Pragmatism

Being practical-minded means to be down-to-earth, practical and realistic. Fundamentally, it is to proceed from reality, boldly upholding truth and science and dauntlessly correcting errors.



Integrity

As for culture and self-discipline of ZKTeco, integrity is the most important of common values and the cornerstone of all virtues. It reminds us to insist on correct orientation and uphold our beliefs.



Excellence

In ZKTeco, excellence means being a world-class enterprise and providing top-standard products and services. Perfection and detail are the best practices of excellence.

Our Partners

ZKTeco's techniques and smart terminals have been applied by most 500 global top enterprises, and its business has already covered more than 100 countries and regions.



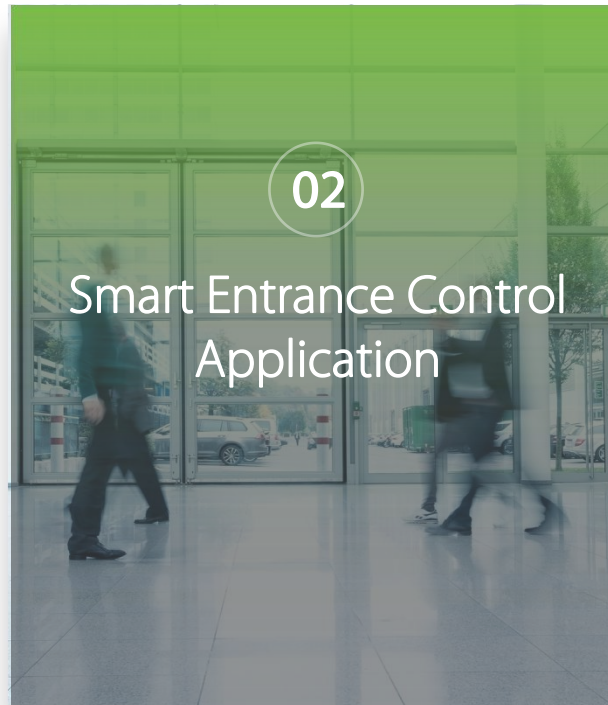
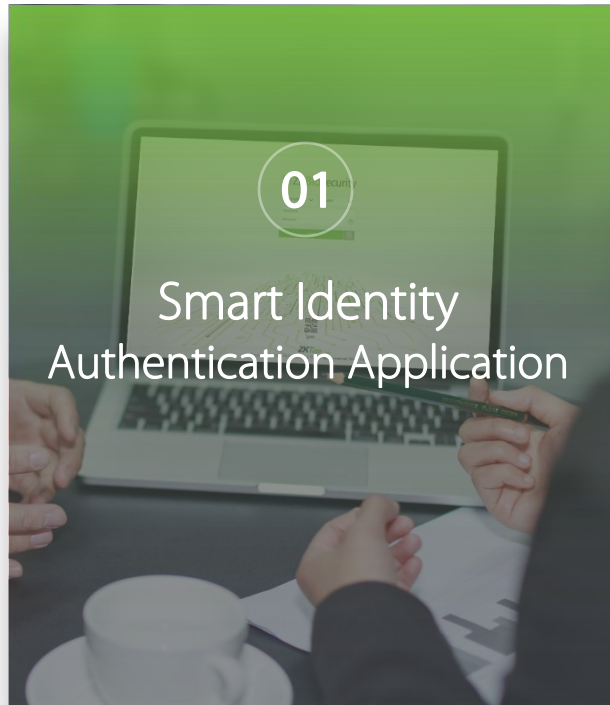
02

Main Business

— Smart Identity Authentication Application , Smart Entrance & Exit Application , Smart Office Application —



ZKTeco is a globally renowned enterprise with biometric verifications as its core techniques, which dedicates itself in these three industries:



Smart Identity Authentication Application

Empowerment Integrated Business Based on Biometric Verification Core Techniques

ZKTeco is a globally renowned provider of **biometric verification algorithm techniques, sensors** and **software platform**, which owns patents of :

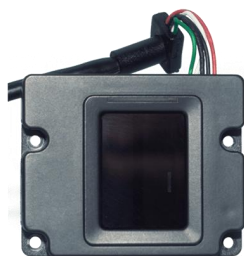
fingerprint, iris, face, vein and palm print recognition techniques etc

computer vision techniques including facial recognition, identification of behaviours, X-ray object identification, and video structure

Which make ZKTeco one of the enterprises in the industry that owns comparatively numerous patents !



From the core technical authorizations of physical and behavioral features including fingerprint, iris, face, and vein to ZKBio Deseer Software empowered by hybrid biometric verification and computer vision and hybrid biometric verification identity authentication O2O smart terminals and solutions



Biometric Module



Biometric Reader



Multi-purpose Integration

we offer one-stop solutions based on smart verification and identity authentication applications for vertical industries, partners, and system integrators.

Multi-purpose Integration

Facekiosk is a revolutionary product series of ZKTECO which combining the latest visible light facial recognition technology, Popular Android operating system and a big touchscreen to offer a limitless potential of facial recognition.

The product has already been built in ZKBio Argus APP to enable basic functions such as self-service visitor management, advertisement display, and also connection to ZKBiosecurity as server.



FaceKiosk-H13C & H13C[TD]

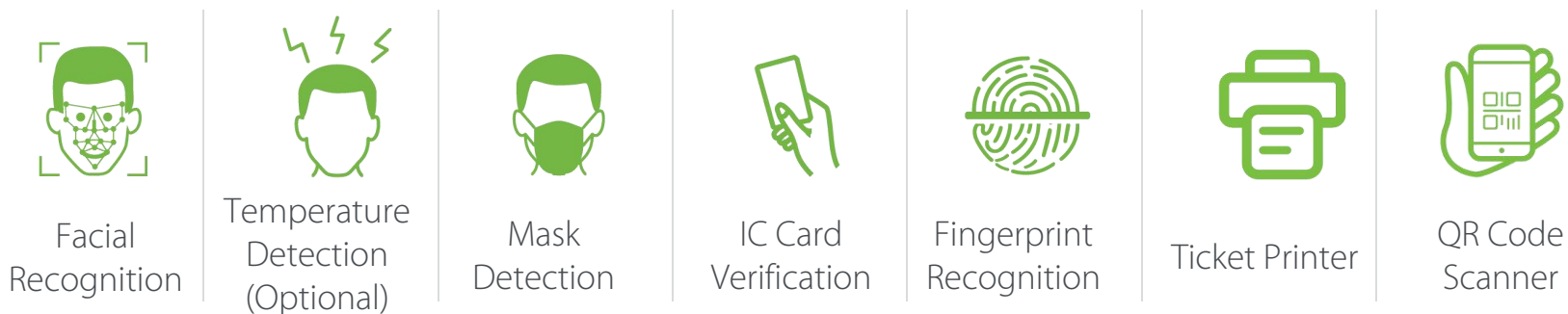


FaceKiosk-H13A



FaceKiosk-H13C series

Android Multipurpose Facial Recognition Kiosk



Relying on the ZKTeco technology and synergizing with ZKBioSecurity, ZKBio Time and other ZKTeco software, it can be applied to many scenes and fields such as time & attendance, visitor self-service visitor management, etc.



Biometric Scanner and Module



SLK20R



SLK20S



ZK9500



ZK8500R

Fingerprint Readers



IM20



HB520



RS100



ZK AFIS-400

Terminals

Smart Entrance Control Application

Smart Entrance & Exit “Person + Car + Object” Software Platform Empowerment Integrated Business

ZKTeco is a globally renowned provider of core techniques, smart terminals and software platforms based on smart entrance & exit applications, and owns a large quantity of software copyrights of software products and solutions and smart terminal patented techniques.

ZKTeco strives to integrate hybrid biometric verification techniques and computer vision techniques with the Internet, IoT, big data and cloud computing, and builds system platform including ZKBioSecurity, ZKBioCVSecurity etc.



Internet



IoT



Big Data



Cloud Computing



Hybrid Biometric Verification Techniques & Computer Vision Techniques →



ZKTeco owns professional development and supply chain teams for
smart terminal of person, car and object passages :



Access Control



Video Surveillance

Smart Security Gate
(Pedestrian Product)Smart
Vehicle & Inspection

Security Inspection



Smart Lock

and globally famous entrance & exit biometric verification computer vision smart IoT hardware and servers, private cloud and public linkage services to provide system integration services for many partners regarding industry solutions, which are widely applied in various fields including :

smart traffic, smart finance, smart education, smart medicine and smart government etc.

ZKBioSecurity

All in One Biometrics Security Solution



(ZKBioSecurity-V5000)

ZKBioSecurity is the ultimate *All-in-One web based security platform* developed by ZKTeco.

It contains multiple integrated modules: employee management, access control, elevator control, visitor management, guard patrol, time & attendance, parking module, consumption (online/offline), entrance control, FaceKiosk management, video management, Temperature & Mask Detection

With an optimized system architecture designed for high level biometric identification and a modern-user friendly UI, ZKBioSecurity provides the most advanced solution for a whole new user experience.

One Platform, Multi-Application



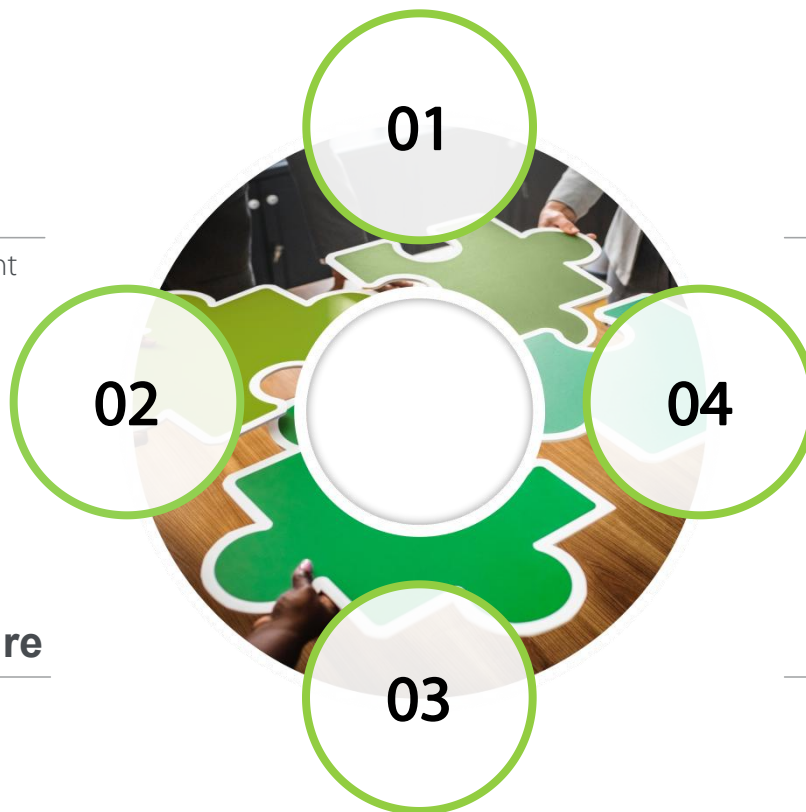
ZKBioSecurity New Architecture Feature

Hybrid Biometric Security Integrated Management Platform

The platform supports security integrated management platform with fingerprint, finger vein, face and other biometric identification methods.

Micro-service Multi-point Distributed Deployment Architecture

Avoid service bloat caused by single point deployment, support multi-point distributed deployment of service.



High Concurrency Communication Middleware, High Security Data Transmission

Support multiple users to operate at the same time; AES256 data encryption is adopted, and HTTPS communication between software firmware is adopted for high security.

More Devices Access Available

Significantly increased the load capacity of the equipment. A single server can access 2000 PUSH protocol devices.

ZKBioSecurity Mobile Application

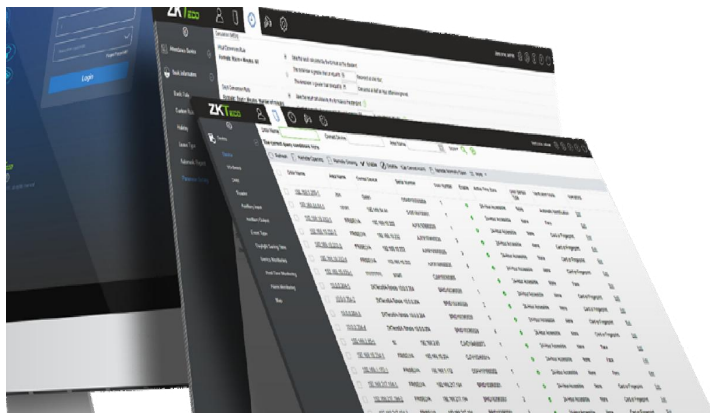
ZKBioSecurity Mobile APP is a mobile client of ZKBioSecurity software.

It allows login with two types of user accounts (roles): administrators and employees. When logging in as an administrator, four modules are accessible on the main menu: Personnel, Access, Visitor, and Parking. These modules realize essential functions such as new personnel registration, real-time monitoring, visitor reservation, parking spaces application review and approval, etc. When logging in as an employee, there would be three accessible functions: attendance & calendar, attendance statistics, and mobile credential. Employees can record their own time and attendance with the app and realize contactless check-in.



ZKBio Access IVS

A Lite Web-based Security Platform



ZKBio Access IVS

ZKBio Access IVS is a **lite web-based security platform** developed by ZKTeco which supports most ZKTeco Hardware.

It provides abundant functionality that fulfills management requirements of small to medium-sized businesses.



- **Support up to 25 doors**
- Reliable Access Control Logic , including Global linkage , Anti-pass back ,Interlock, etc.
- Reliable Video Management System module.
- Support basic video surveillance functions, including real-time live view, playback, video recording, remote searching, etc.
- Support facial recognition NVR .
- Supports English/ Spanish/ Thai/ Indonesian/ Vietnamese/French/Japanese/Italian/German/Romanian/Polish/Korean/ Portuguese/Turkish/Traditional Chinese and Simplified Chinese.
- Supports employees quick access doors with Mobile Credential.
- Supports temprature and mask detection

Temperature Detection Products

With the help of **Computer Vision technology**, ZKTeco's upgraded terminals can identify whether the user is wearing a mask, while conducting **fast and effective** facial recognition.



SpeedFace V5L[TD]

Facial Recognition Terminal with Temperature Detection



ProFace X[TD]



ZK-D3180S TD

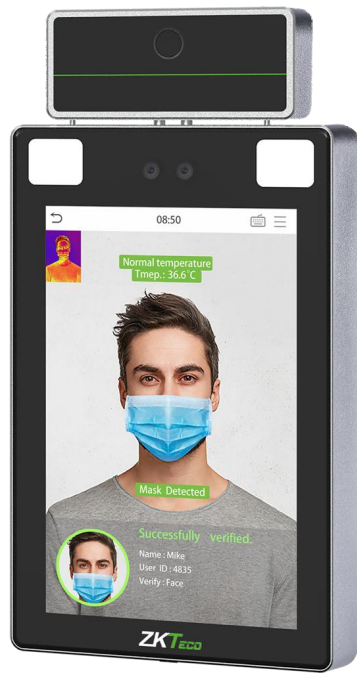
Walk-Through Metal Detector with Temperature Detection



SBTL8000

Touchless Entrance Control Solution with Temperature Detection

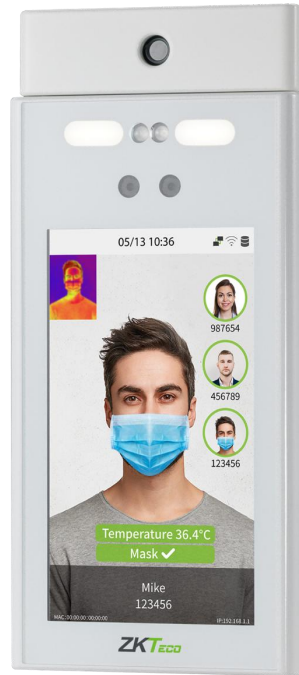
Thermal Imaging Products



ProFace X[TI]



SpeedFace-V5L[TI]



RevFace



Facial Recognition



Temperature Detection



Mask Detection



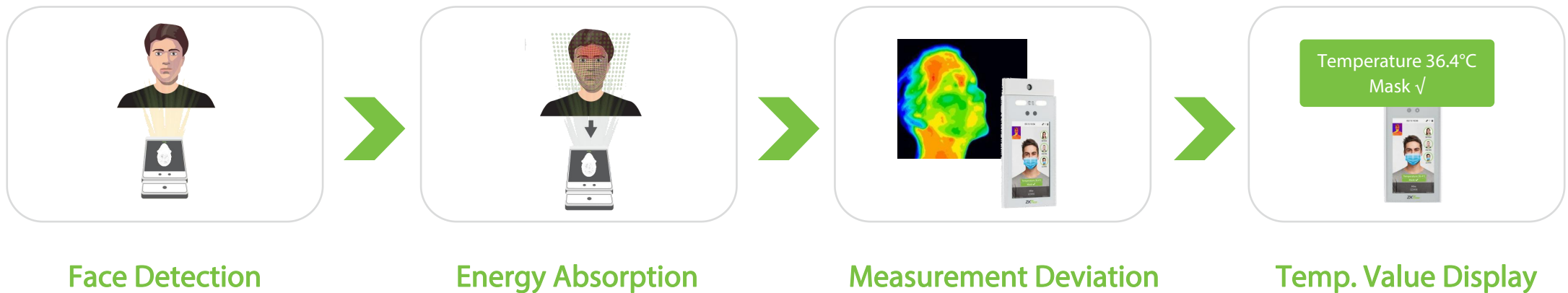
Wide Pose Angle Acceptance

- Touchless Sensor
- Multi-point temperature check with auto-forehead detection
- Extra-wide angle recognition (+/- 25 degrees)
- Fast, accurate, and convenient
- Proactive long-distance temperature measurement

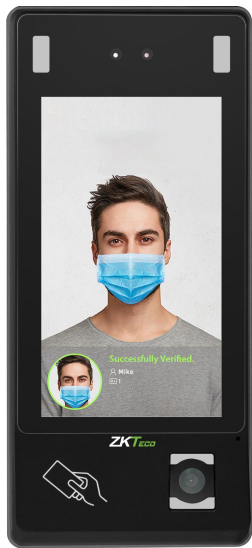
How ZKTeco's Thermal Imaging Technology Works

Zkteco's thermal imaging technology is a non-contact automatic thermometer that provides a maximum of 10,800 (120*90) measuring points and detects temperature differences as small as 0.3°C.

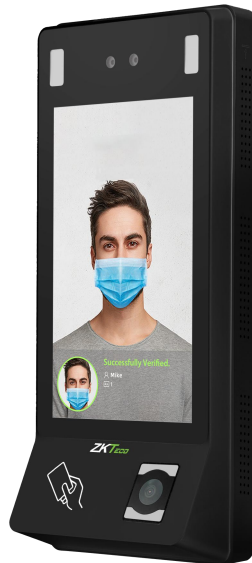
Also, the system will immediately auto-select the highest temperature among all results detected on a surface from a distance



Visible Light Facial Recognition A&C Terminal

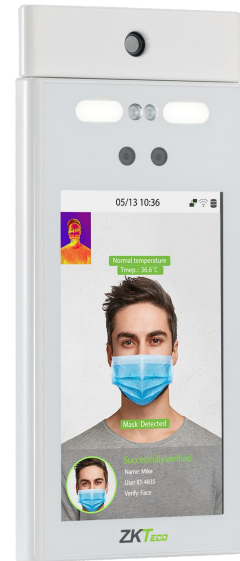


G4 pro



G4 pro

- 4G solution | Bluetooth | Wi-Fi
- OS: Android support LCDK for 3rd-party application integration



RevFace15[TI]

- Wall-mountable
- OS: Linux



SpeedFace-V4L



SpeedFace-V4LM1

ProFace X Series

Proface X is a fully upgraded version of the Proface product line, which is designed to deal with all kinds of scenarios.

Outdoor & Vandal resistant Facial Recognition Terminal



Ultra-Large capacity of
50,000 face templates



high visibility under strong
and direct light




Rapid facial recognition
within 0.3s



IP68 ingress protection rating
IK04 vandal-proof



Touchless Access Control Terminals

Product						
	Elite Pass	FaceDepot-7BL	G4L	ProFace X[P]	SpeedFace-V4L	SpeedFace-V5L
Face Capacity	30,000/50,000	10,000	10,000	30,000(1:N)	800	6,000
Palm Capacity	N/A	3,000	N/A	5,000(1:N)	800	3,000
Card Capacity	N/A	10,000(optional)	10,000	N/A	1,000	10,000

Smartphone Video Intercom Access Control Solution

An Automatic and Remote Experience

- Two-Way Communication
- Video Preview Monitoring
- Message Notification
- Real-time Capture
- Remote Unlock
- Easy Configuration

ZKTeco offers Office-level Complete Video Intercom Solutions, video intercom client software

ZKBio Talk support calling from device in local area network, receiving calls and remote door opening, and are also able to capture and record clips.

ZKView mobile app. enables view and management of access anytime and anywhere for complete access control!



ZKBio Talk



ZKView APP



Video Intercom Access Control Terminal Dual Frequency RFID

Notus

- Two way-audio. Remote Unlock Via ZKView Mobile App
- Protection level: IP65
- Multi Frequency RFID Card Reader: ID / IC / IC EV1
- A&C push protocol
- Brushed metal surface
- Communication via TCP/IP and Wi-Fi
- Reader Mode connect to control panel, via RS485 and Wiegand



Outdoor & Vandal-resistant Facial Recognition Terminal

Proface X

- Multiple Verification Modes: Face / Card / Palm
- Enhanced visible light facial recognition with deep learning built-in
- 8-inch touch LCD
- Recognition distance: 0.3 - 2.5m
- Video door phone intercom system
- Dynamic QR Code & Bar Code and ID / MF module (Optional)
- IP68 & IK04



Time & Attendance and Access Control Terminal with Visible Light Facial and Palm Recognition

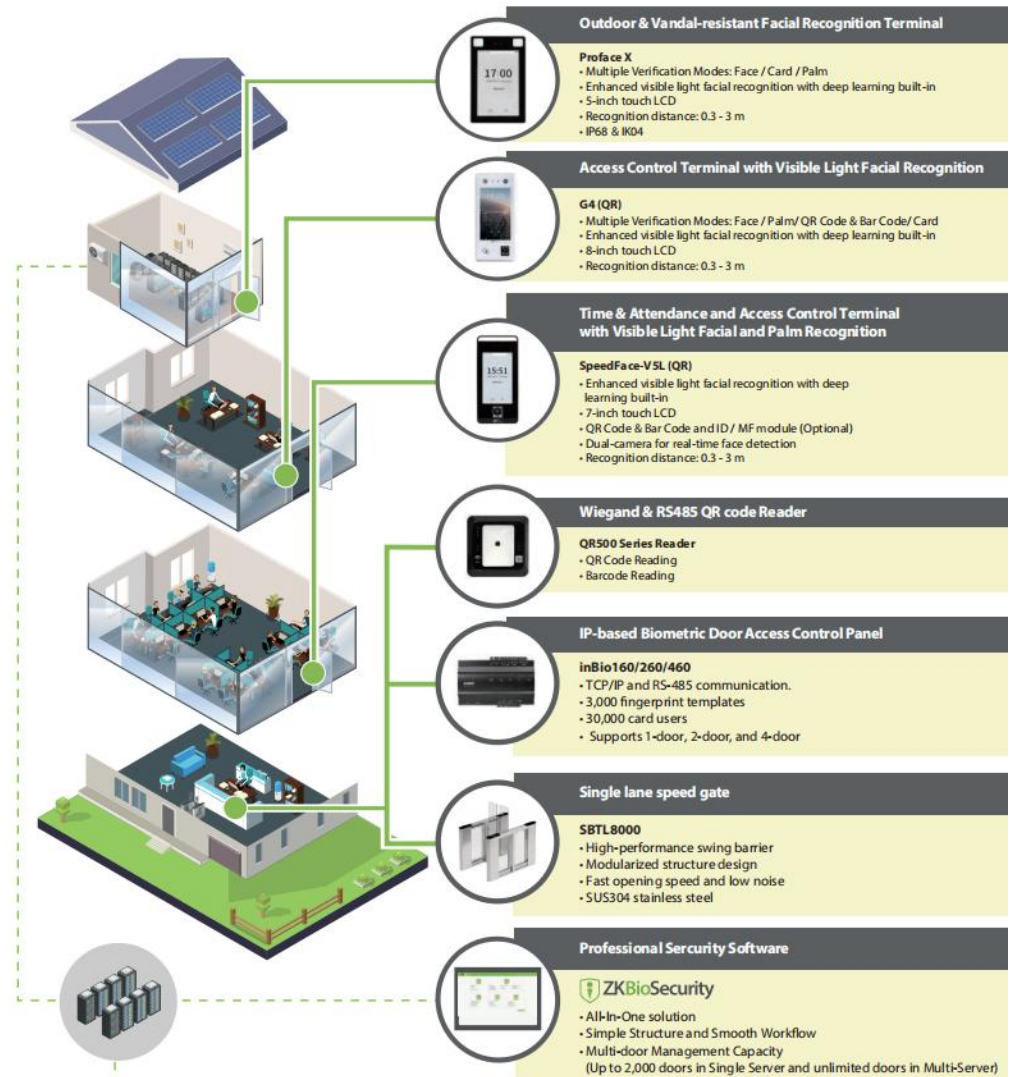
SpeedFace-V5L

- Enhanced visible light facial recognition with deep learning built-in
- 5-inch touch LCD
- Dual-camera for real-time face detection
- Recognition distance: 0.3 - 2.5 m
- Video door phone intercom system
- Dynamic QR Code & Bar Code and ID / MF module (Optional)

Scramble QR Code & Barcode Access Control Solution



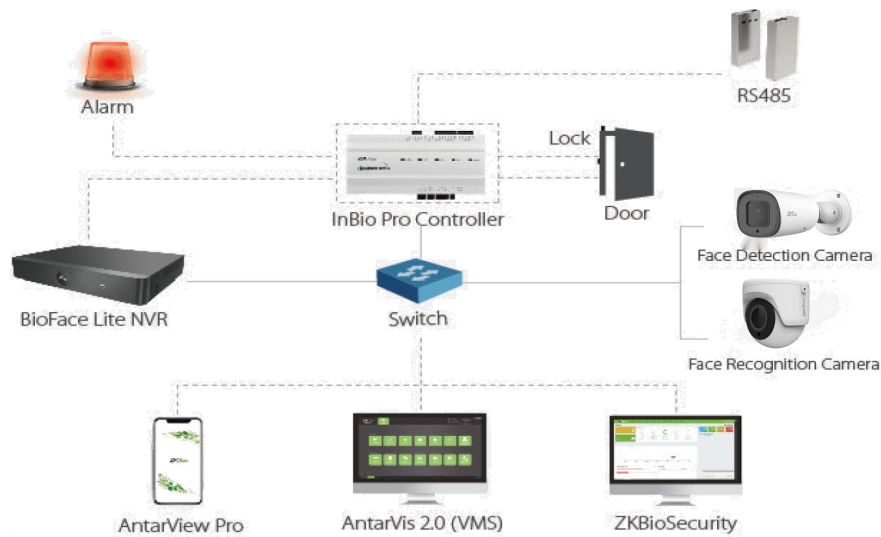
ZKTeco's newly released QR Code Access Control Management Solution . With QR codes delivered to mobile phones for scanning, no more physical cards and Keys are needed anymore, management efficiency and scalability Cost-effectiveness, the solution is ideal for various applications including office, hotel and other service premises etc.



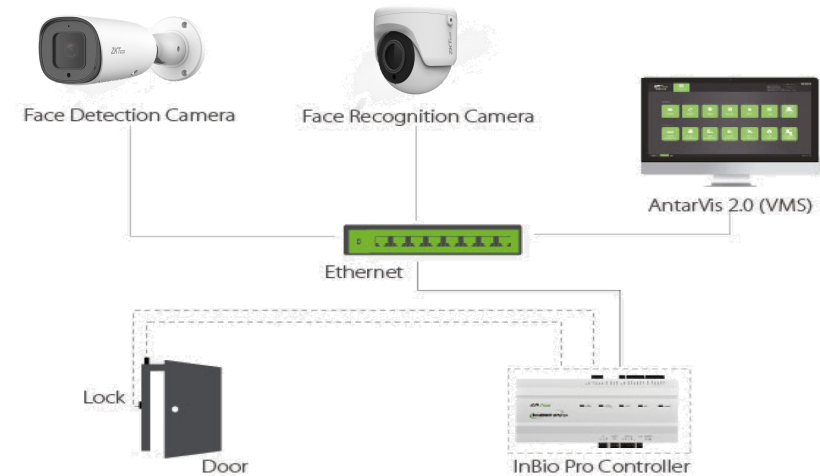
BioFace Lite Access Solution

BioFace Lite Integrated Solution provides a simple structure (NVR+IPC) to **live capture and extract human faces and a comparison database up to 100,000 face images**. By working with ZKBioSecurity Management Software and inBio Pro Controller, the system can realize **unconscious access control and attendance management**.

Schematic Diagram _1



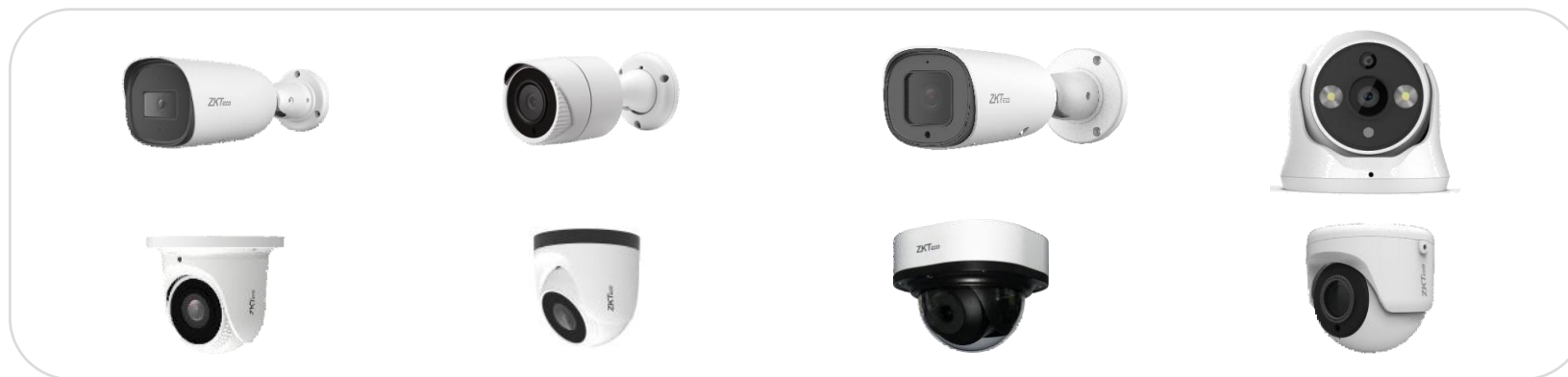
Schematic Diagram _2





BioFace Lite Integrated Solution — Product Lineup

Face Detection/
Recognition Cameras

2MPX | 4MPX | 5MPX | 8MPX



BioFace Lite NVR

Model	 Z8356NMR-4F	 Z8608NF-8F
Face Recognition	4ch	8ch
Face Templates	5,000	50,000
Matching Speed	3~4 faces/sec	30 faces/sec

Computer Vision Surveillance System



Tracking & Positioning of People and Vehicles

- Search people by image
- Automatically jump to map search function by retrieving personnel
- View Personnel Details
- View Real-time Video
- Track analysis



Extraction and Categorization of Face, Body & Vehicle Features

- To extract useful information by analyzing the Attribute of target objects, such as gender, age, new and old users, clothing, color, orientation, etc.
- Through attribute search, the location range can be narrowed to quickly retrieve the target.



Multistore 3D Map for Object Positioning

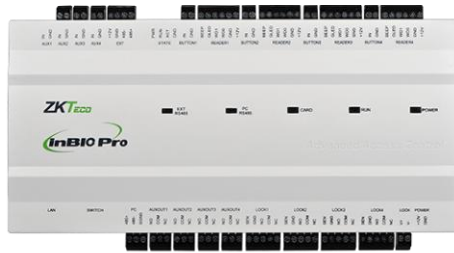
- Analysis of recent locations, narrowing the search scope and assisting target search
- Analysis areas where people often appear or pass, and target behavior habits



Smart Monitoring & Control and Inter-linked Access Control

- Monitoring & Control: Cross line alarm, video loss alarm, video occlusion alarm
- Intelligent Face Control Support: Custom personnel list database, Inside and outside library control, etc.

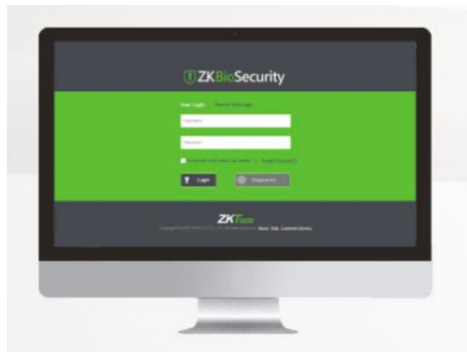
BioFace Lite Integrated Solution — Software Selection



Inbio Pro 260/460



AntarVis 2.0 -VMS









ZKBioSecurity V5000-Plug



AntarView Pro -App

(Controller & Management Software & Mobile Application)

Key Features:

-  Face Record Search
-  Attendance Management
-  Access Control
-  Customer Characteristics Analysis
-  Visitor Management
-  Whitelist/Blacklist Alarm

Smart Security Gate



FBL6000 Pro Series

Flap Barrier



SBTL6000 Series

Swing Barrier



TS5000A

Tripod Turnstile



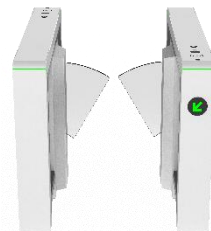
FHT2400

Full Height Turnstile

Mars Series Mars Pro Series



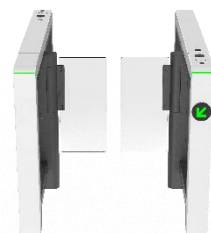
Mars -F1000



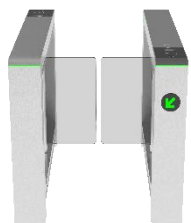
Mars Pro-F1000



Mars-S1000



Mars Pro-S1000



Mars-B1000

Highly Durable and Low Maintenance Costs

- Modularized structure design
- Exposed mounting holes for easy installation
- Mainly made of SPCC (option: SUS 316 stainless steel)

PGIC Controller

- Equipped with a PGIC controller
- Access control
- General features and parameters settings on the controller's menu

LED Indicator

- Visual cues for correct walking direction
- Clear guidance with green and red illustration

Switchable Reader Panel

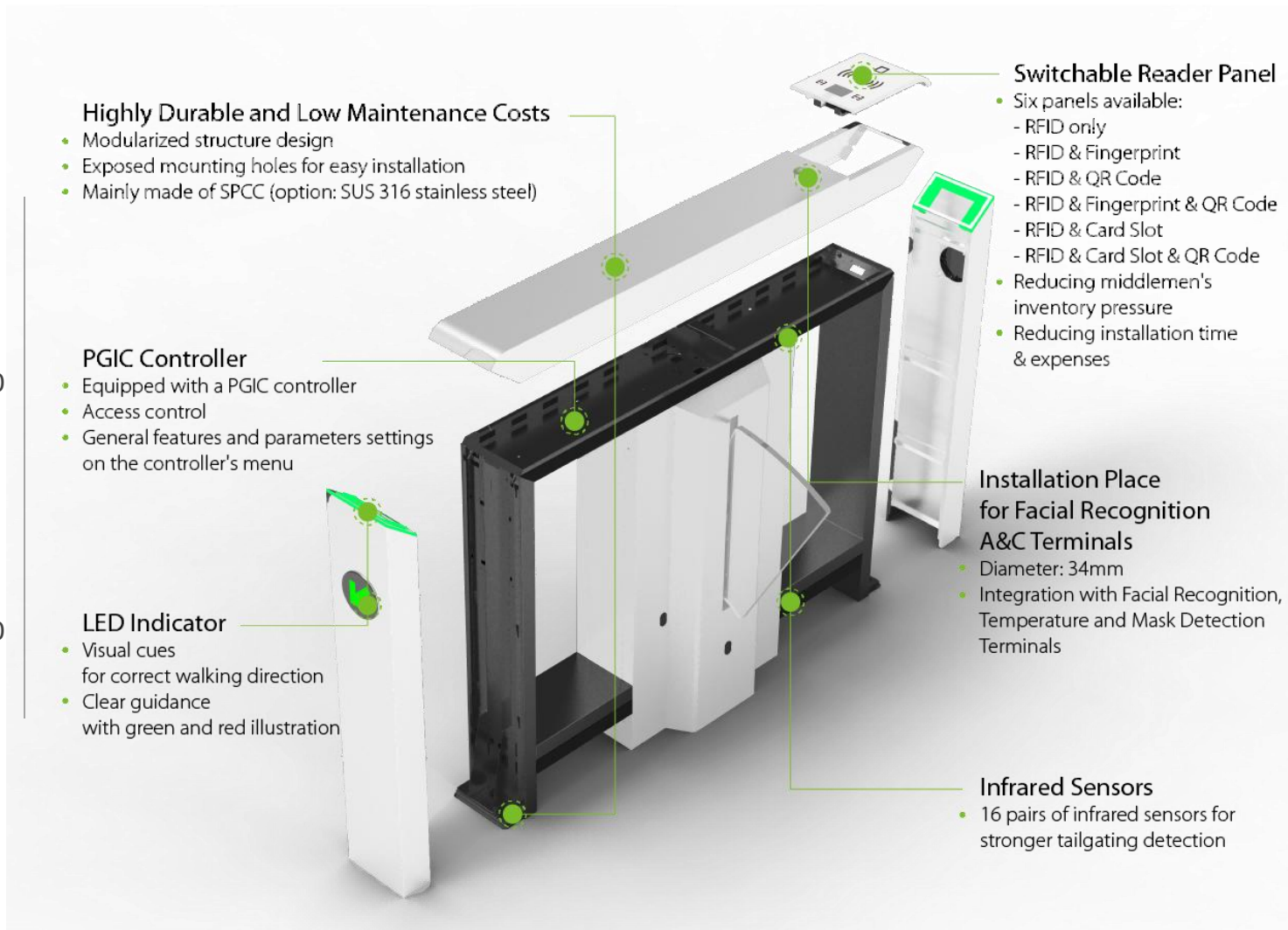
- Six panels available:
 - RFID only
 - RFID & Fingerprint
 - RFID & QR Code
 - RFID & Fingerprint & QR Code
 - RFID & Card Slot
 - RFID & Card Slot & QR Code
- Reducing middlemen's inventory pressure
- Reducing installation time & expenses

Installation Place for Facial Recognition A&C Terminals

- Diameter: 34mm
- Integration with Facial Recognition, Temperature and Mask Detection Terminals

Infrared Sensors

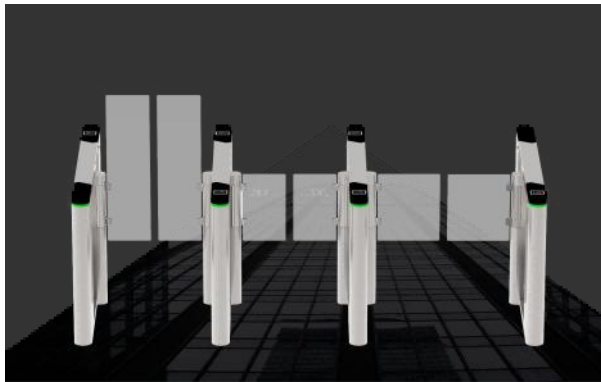
- 16 pairs of infrared sensors for stronger tailgating detection



SBTL8000 Series

SBTL8000 is an indoor speed gates series which featured by its modular reader panel design.

Speed Gate



(2019 new product——SBTL8000)



Modular Reader Panel for In-time Market Response

Built-in LCD screen, change settings easily.

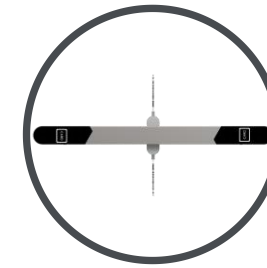
Support different verification methods :

- RFID
- QR Code
- Fingerprint
- Visible light facial recognition



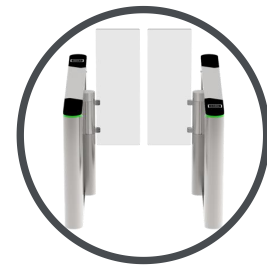
Servomotor Faster Opening

- Faster opening speed
high barrier panel:<1.2 s
mid-height :<0.8 s
- High control precision
10 pairs of high-quality infrared sensors
- Lower noise



Slim Cabinet Design

120 mm wide
Reduce the space occupation , and more aesthetic visually.

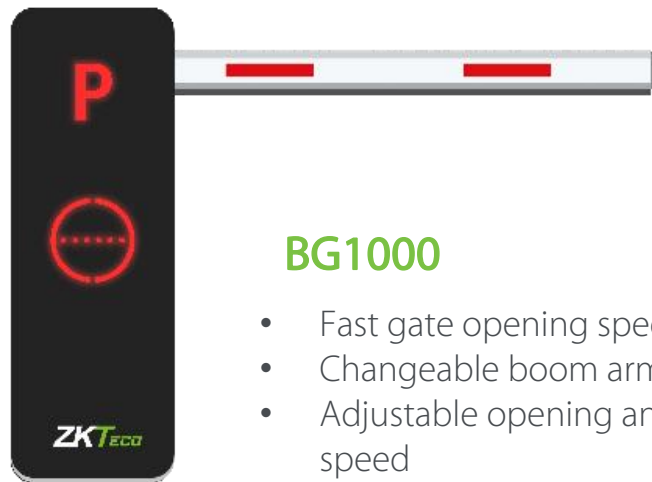


Increased Flap Height

Effectively avoid uncivilized behaviors like jumping over barrier gates.

Smart Vehicle & Inspection

Automatic Barrier Gate with Telescopic Boom Arm



BG1000

- Fast gate opening speed (1.5s)
- Changeable boom arm direction
- Adjustable opening and closing speed

Parking Barrier



LPR Product

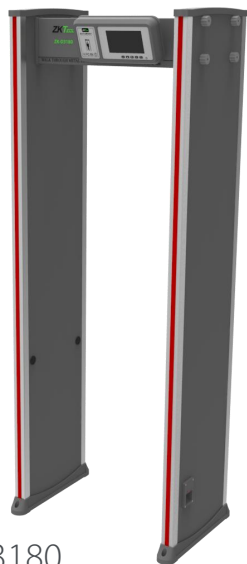


UHF Product



Plock

Security Inspection



ZK-D3180

Walk Through Metal Detector



ZK-D300



ZK-D100S

Hand Held Metal Detector

People Inspection



ZKX Series X-ray Security Inspection System

Freight Inspection



Explosives & Drug Detector



Liquid Detector

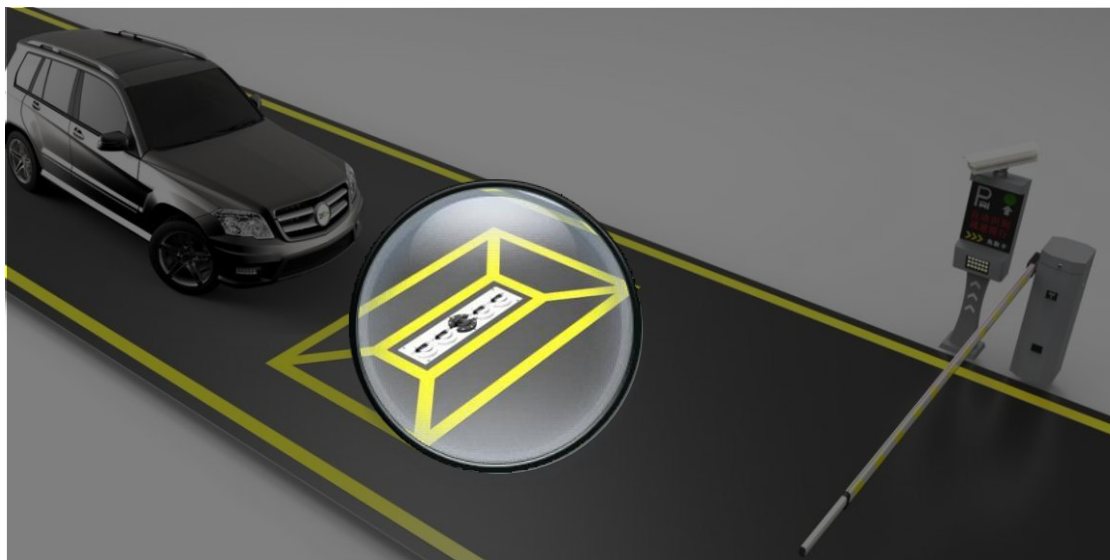
Blade6040

Screener Assist X-ray Baggage Inspection Systems

- Real-time Detection to Aid Operators in Identifying Suspicious
- High Performance – Typical Penetration up to 40 mm of Steel
- Startup with Fingerprint
- Four Layers of Lead Curtain
- Uninterruptible Power Supply
- Equipped with Input & Output Rollers
- Adjustable Conveyor Speed
- Real Time Remote Monitoring System
- Luggage Image and Walk Through Metal Detector
- Status Display on the Same Screen
- Threat Image Projection (TIP)



Vehicle Inspection System

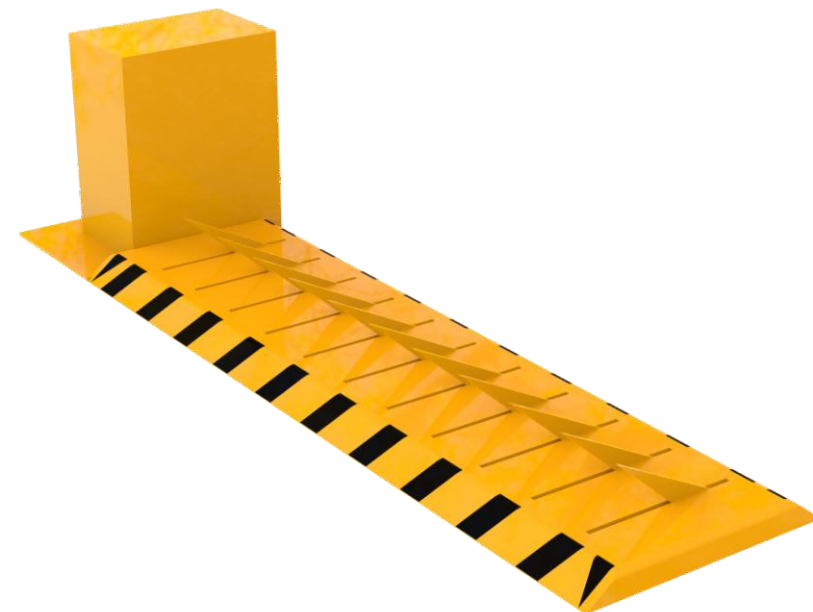


Under Vehicle Inspection System



Automatic Bollard

- Equipped with LED
- Raise / lower smoothly
- Auto / Manual lowering



Tyre Killer

- High security level
- Raise / lower smoothly
- Auto / Manual lowering

Cloud-based Residential Locks

Zigbee



DL30Z

TL300Z

Wi-Fi



TL800

HBL400

BLE5.0

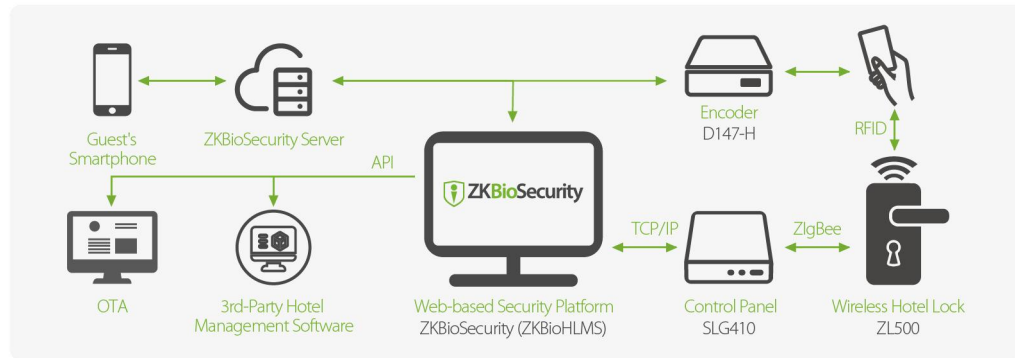
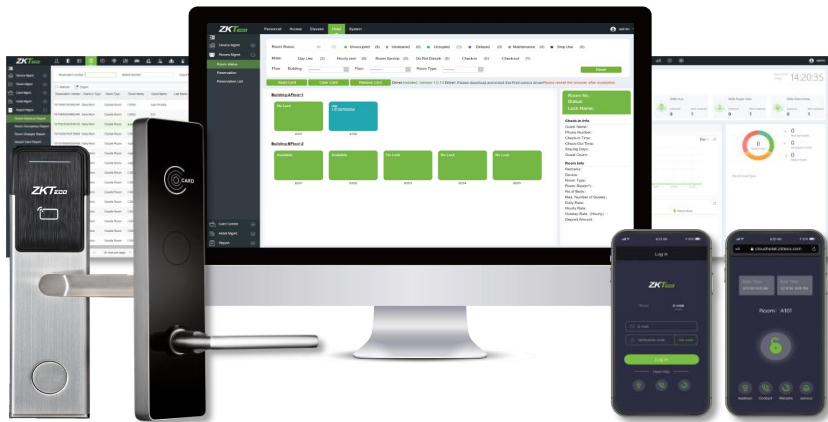


AL40

ML300

ML200

App-Free Smart Hotel Solution

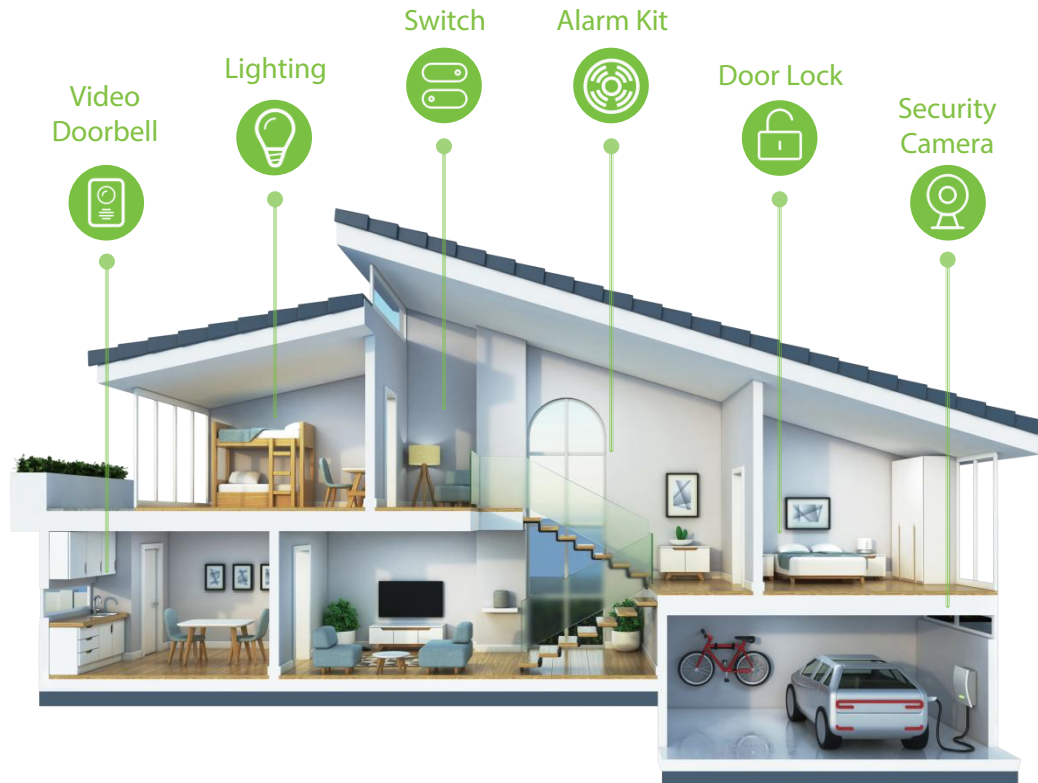


ZKTeco hotel Lock uses Zigbee wireless transmission technique. Upon connection to wireless control panel and setting via **ZKBio HLMS** (a version of ZKBioSecurity) software, hotel users may use registered door cards or smart phone to open room doors; staff members may also check any door lock status via the software.

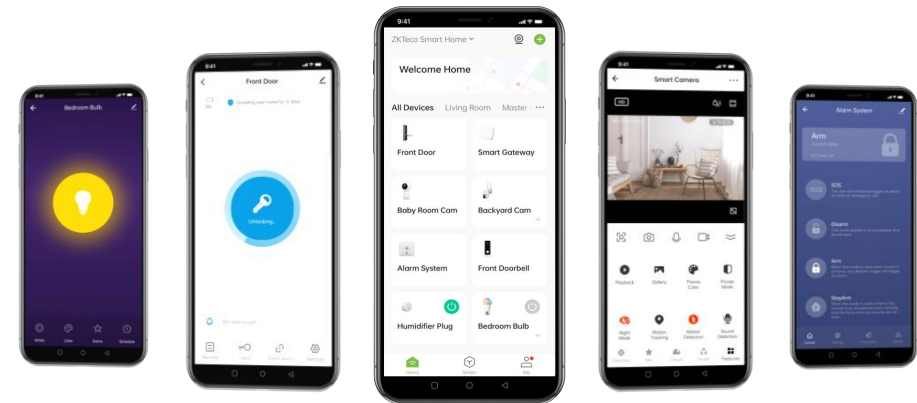
Key Features:

- Contactless Mobile Door Opening
- Remote Control with Zigbee Communication
- Real-time Power Status Monitoring
- Report Lost Card
- Open API for 3rd Party
- One Card Solution
- Visitor Arrival and Check-Out Notification
- Report of Hotel Occupancy Rate

Smart Home Security System



ZSmart is a mobile application designed for the home security system, it aims to protect your loved ones anywhere, create a seamless experience with easy setup of smart devices, and share connected products and services.



Smart Office Application

ZKTeco+ Smart Office Cloud Platform Empowerment Integrated Business

ZKTeco+ Cloud Platform is built for the establishment of the **“Time Management + Space Management”** duo-core concept, and the private cloud platform with high security level of data archive.

The service desk offers:



Information Service



App. Store



Authentication
Authorization Service



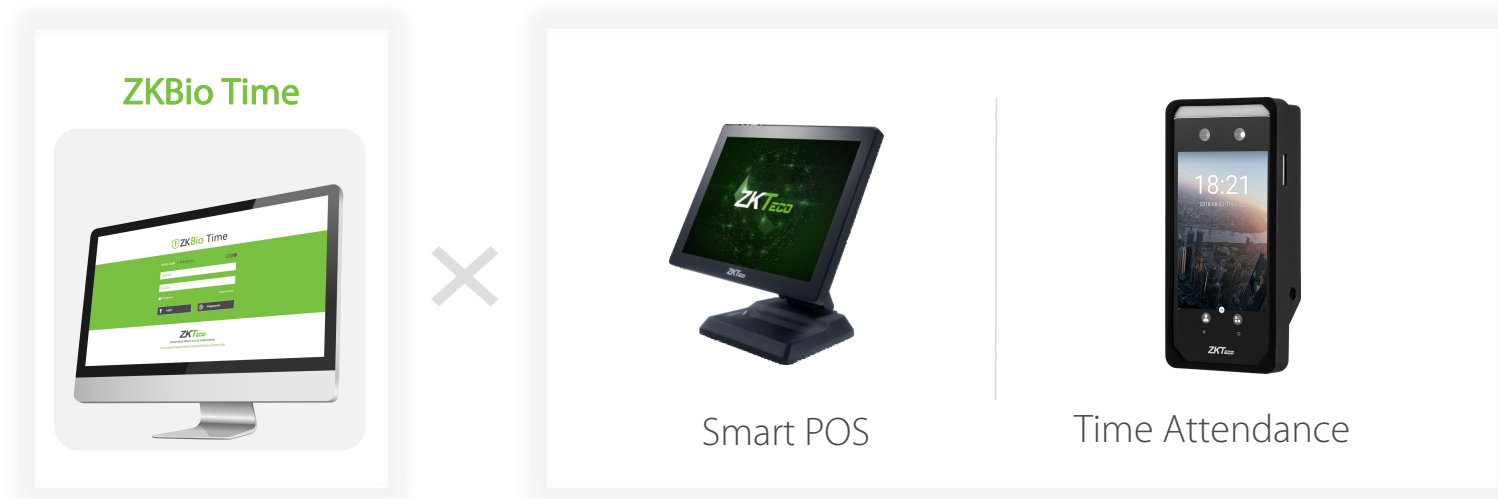
API Service
Platform



Cloud Storage
Service




“Cloud Application” connected through ZKTeco+ links up smart terminal devices in smart office applications to IoT devices of attendance, access control, visitor management and POS, Smart terminal devices are connected through software platforms including ZKBio Time and ZKBio Cloud etc.,



which offers **one-stop O2O solutions** for enterprise smart office that are widely applied in various fields including smart office and smart education etc.

ZKBio Time

ZKBio Time is powerful **web-based time attendance software** which provides a stable communication for thousands devices through Ethernet | Wi-Fi | GPRS | 3G | 4G.

-  Flexible Shift Schedule
-  Mobile Application
-  Real-time Monitoring
-  Attendance Calculation and Various Reports
-  Access Control Module
-  Payroll Management
-  Meeting Management
-  Mask & Temperature Detection
-  Easy Integration with API



Web-Based T&A Management Software

Time Attendance Devices

ZKTeco Time Attendance series with cutting edge hybrid biometric verification technology products and solutions provide a full range of solutions including various fingerprints / RFID / face identification / palm recognitions / time clocks / portable time clocks / time and attendance management software, etc.



EFace10
Face + RFID (Optional)



UA760
Fingerprint + RFID



ZPad Plus
Fingerprint + RFID



MB560-VL
Face + Fingerprint + RFID

Green Label T&A Device



7-inch
Touch Screen
Linux Operating System
10K Face

G4L

Visible Light Illumination Facial Verification

**Proactive Facial Recognition**

Without needing to stand steadily in front of camera, users walk, look ahead and get automatically recognized.

**New Height of Anti-Spoofing**

With the applied CNN deep learning algorithm, Anti-spoof function has been greatly enhanced and is able to prevent fake faces, photos and video attacks.

**Speedy Recognition**

The visible light facial recognition is way faster than the previous near IR facial recognition, and the recognition distance has been greatly extended to up to 3 meters long, which significantly improves maximum traffic rate.

**Wide Pose Angle Acceptance**

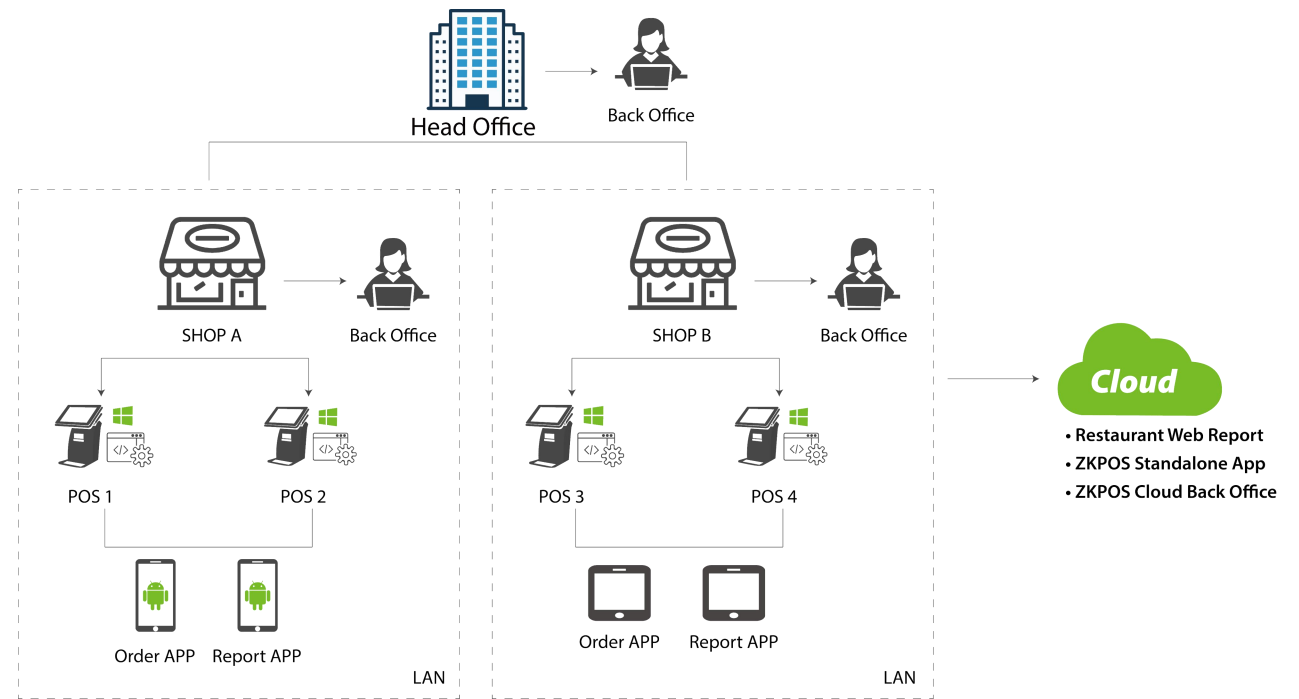
As the CNN deep learning algorithm is applied, the terminals now have true cognition of faces, which enables larger pose angle acceptance by applying 3D rendering.

ZKPOS Solution

ZKPOS Softwares are built to facilitate **restaurant | retail | wholesale | supermarket** business functions, **improving** the accuracy, efficiency, and effectiveness of point of sale operations, **providing** better quality and igniting innovations with customer satisfaction.



- It includes local and cloud solutions for Windows, Android.
- Not only a professional pos system, but also a new business mode by ZKPOS store for offline and online business.



(ZKPos Software Solution)

POS Terminals and Peripherals



ZKBio 810

- Power-efficient Intel® Celeron J1900 2.0 GHz Quad-Core processor
- Slim stand design with small footprint
- Multiple I/O interfaces for peripherals
- Optional built in 1D/2D barcode scanner, MSR, RFID
- Optional VFD&10" customer display
- Modular design makes installation easier



ZKBio 910

- Multiple I/O interfaces for peripherals
- Optional VFD&10" customer display
- Fingerprint verification makes transaction safer
- Modular design with aluminium alloy material
- Dual hinge stand, table stand and standard VESA mount
- VFD and second display can be adjusted in angle

80mm and 58mm Thermal Printer



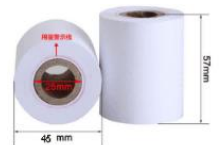
Barcode Scanner



Cash Drawer



Thermal Paper



Peripherals

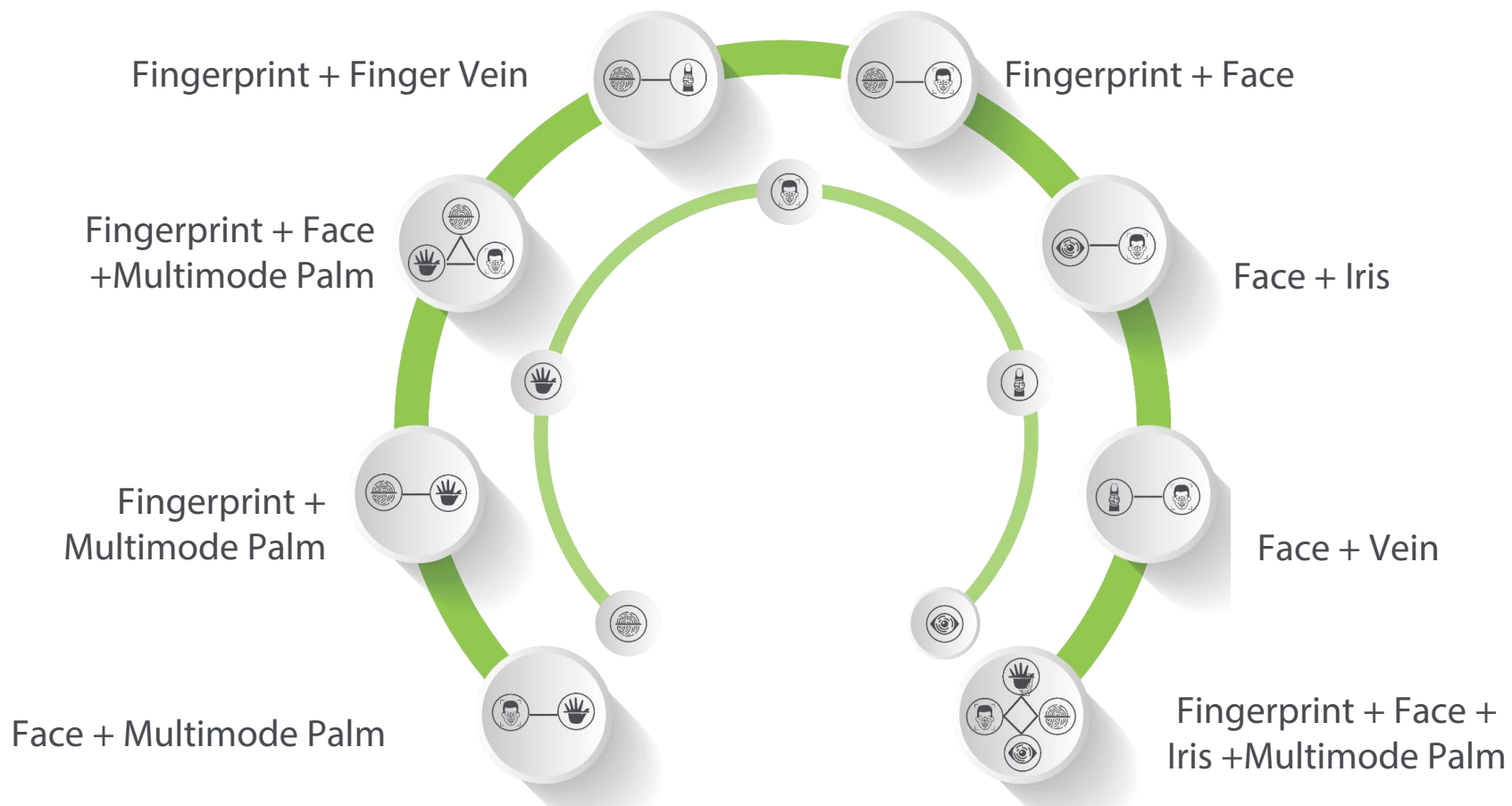
03

ZKTeco Strength

ZKTeco has a strong R&D, Marketing, Logics, and Service Network.



Core Biometric Technology



Fingerprint Recognition

ZKTeco offers own intelligent property rights based algorithms, in the meantime our templates are privately owned, ZKTeco never releases algorithms and template formats to any 3rd party, the reliability of ZKTeco algorithms is based on our 20-year algorithm development experience .



- PIV Certificates
- Live fingerprint detection
- Quick recognition of dry, wet and rough fingerprints



Finger Vein Recognition



Finger vein patterns are almost impossible to counterfeit because they are located under the skin's surface.



Main features of combining fingerprint and finger vein technology

- Since finger veins are covered by skins and invisible to human eyes, there are lower risks of spoof or duplicated vein features, and it is even lower of the combination of fingerprint and finger vein features, which provide **higher anti-spoof ability**;
- **Suitable for large-scale users**: the combination of fingerprint and finger vein verifications can reduce rejection and failure of verification and enables applications with a large number of users;
- **Small storage space required**: the template of fingerprint and finger vein is lower than 2Kbyte.

3-IN-1 Palm Recognition

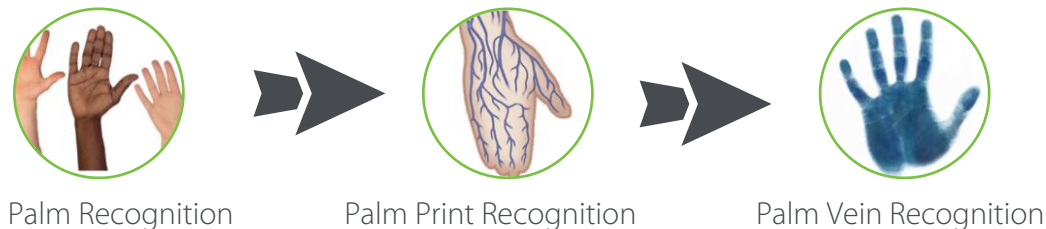
Powered by Computer Vision Technology



The newest generation of palm recognition technology is fully upgraded in all aspects in terms of recognition method, which combines palm, palm print and palm vein recognition as one.

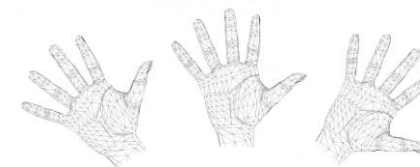
- Anti-spoofing Technology**

All attacks are guarded throughout 3 layers :



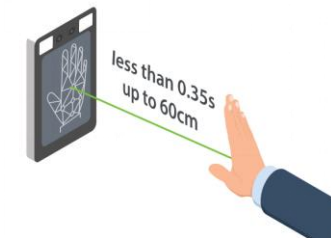
- Wide Angle Tolerance**

+/-60 degrees in roll axis
Slight angle twist in both pitch and yaw axes



- Ultra-long Recognition Distance**

Range of 10 – 60 cm
Less than 0.35s



Visible Light Facial Recognition

Enhanced Visible Light Facial Recognition is the latest technology of ZKTeco, aimed to overcome shortcomings of previous facial recognition and achieve an all-rounded upgrade on whatever performance and reliability by using Deep Learning.



New Height of Anti-Spoofing

- Anti Fake Video Attack
- Anti-Fake Photo Attack
- Multiple Biometrics



Speedy Recognition

- Ultra-fast real time < 0.6s
- High speed processing time



Proactive Facial Recognition

- Opening doors without standing in front of the camera
- Auto-recognizes Everyone



Wide Pose Angle Acceptance

- Extra wide angle recognition (+/- 30 degrees)
- Make-up, glasses ,etc.



Touchless for Better Hygiene

Clinic, hospital, construction site, factory, etc

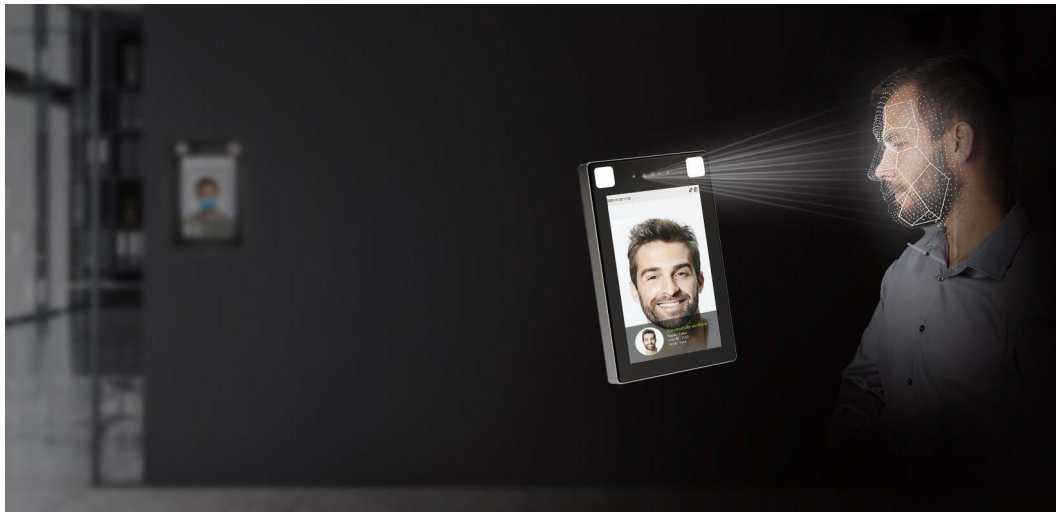


Support ZKBioSecurity

- Flexible Group Scheduling
- Multi-Location
- User-friendly mobile App
- Report

3D structured light

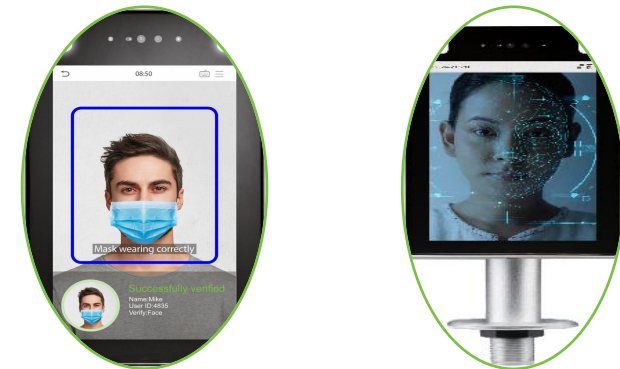
How does 3D structured light work against spoofing?



3D structured light facial recognition enables a high-speed camera to determine the depth and surface information of an object placed in front of it. In simple terms, the system projects light onto the object's surface to identify the distortions in its surface. Such distortions will not be present in a flat image that a spoofer uses. 3D structure light is best solution work with access terminal.

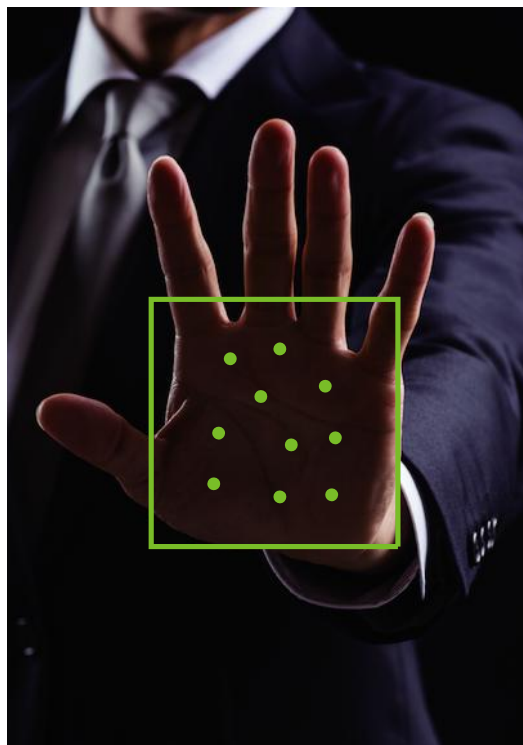
- **ProFace X(SL)**

ProFace X(SL) makes spoofing a thing of the past with 3D structured light:



As the first facial recognition product in the security industry with 3D imaging technology, ProFace X(SL) would be ideal for high-security places, such as banks, police stations, warehouses, etc. Customers can wall-mount it and install on access gates, indoor and outdoor.

Multispectral Touchless Palm Recognition



ZKTeco Multispectral Touchless Palm Recognition utilizes conventional visible light and pioneering near-infrared light to achieve quick, accurate and convenient palm recognition.



- It enables precise, **anti-spoofing** and **long-distance** recognition of palms, which is widely applicable to various environments including those lacking normal light sources.
 - High Performance in Short to Medium Distance
 - Unique Palm Detection Algorithm
 - Ultra-fast Recognition Time in 0.5 Second
 - High Performance towards Various Human Races
 - Better Environmental Adaptability and Performance in Weak Light Environment
 - Anti-spoofing Technology
 - Wide Palm Angle Acceptance
 - Higher Accuracy

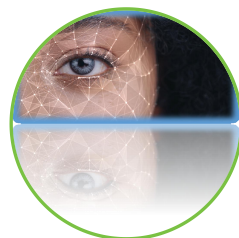


Touchless Iris & Face Recognition



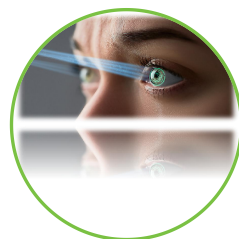
ZKTeco Iris Recognition utilizes near-infrared light for long-distance, touchless biometric verification of human iris.

Benefits of Iris Recognition



- **Accuracy**

Since Iris texture has the most complicated feature in all kinds of human biometrics, the iris recognition is acknowledged as the most accurate forms of biometric verification.



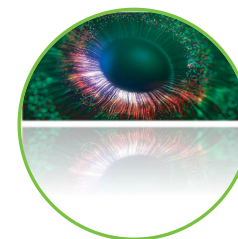
- **Contactless**

providing a contactless solution for better hygiene and convenience.



- **Scalability**

Iris recognition is very flexible and scalable which are well suited to both large and small applications for business and office.



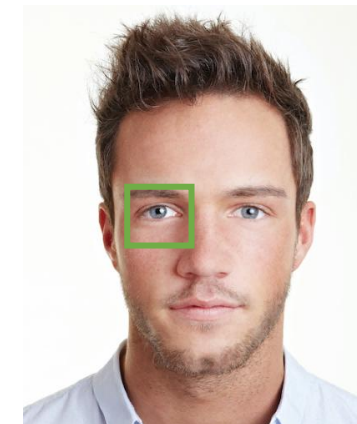
- **Quick Recognition**

After enrolled in the recognition system, user can complete the entire authentication within just a second.



- **Liveness Detection**

The technology can detect movements of the iris, and gaze of eye to identify the liveness of an individual.



R&D Centers

ZKTeco has various centers for development, design and innovations in India, Dongguan ,Xiamen and Dalian.

1,100
R&D Engineers



These expert team consists of scientists from high-tech companies such as Apple, Google and Cisco



Researches include:
Contactless biometrics
Deep learning platform
International Cloud infrastructure



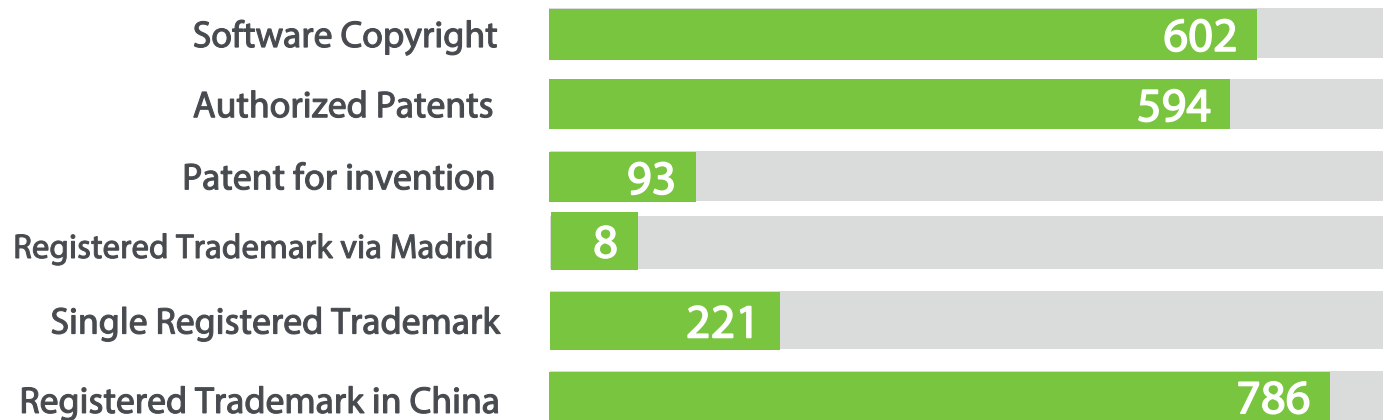
At present, ZKTeco’s techniques and smart terminals have been applied by most 500 global top enterprises, and its business has already covered more than 100 countries and regions.

Hardware | Software | Middle Software | Apps Mold | Algorithm

ZKTeco Global R&D Center



Intellectual Property



The quantity has doubled every year in terms of number of patent registration

Protect intellectual property rights

Stimulate knowledge innovation

Make full use of intellectual property rights

Enhance international competitiveness

Automated Manufacturing Base

Now we have nearly 20,000 square meters of production area at Tangxia and surrounding areas, and a total of nearly 200,000 square meters in Zhang Mu Tou Manufacturing Base which is under construction.



Automated Manufacturing

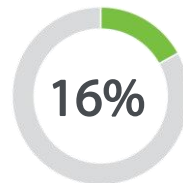
ZKTeco has a large factory with the most advanced production machinery.



Miracle Line

Established in 2018.

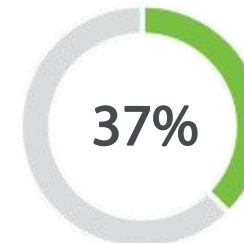
It has 8 direct operators, with an average output of 1100 units per day and 13.75 units per hour.



Reduce in Worktime



Reduce in Personnel



Increase in Outputs



Increase in Productivity

(Compared to the traditional product line)

The Miracle line is based on the shortening the concept of leaning thinking . Shortening the delivery cycle of products, eliminating non-value-added activities in all links to achieve the purpose of reducing costs, improving quality and creating value for the customers.

Quality Control System

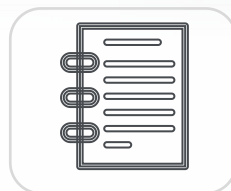
Since establishment, ZKTeco's biometric devices have been shipped to all over the world.



Supply Chain Management



Product Testing



Quality Control System



NPI:

Professional NPI team responsible for wholesome quality control system which includes R&D, trial product and product manufacturing.



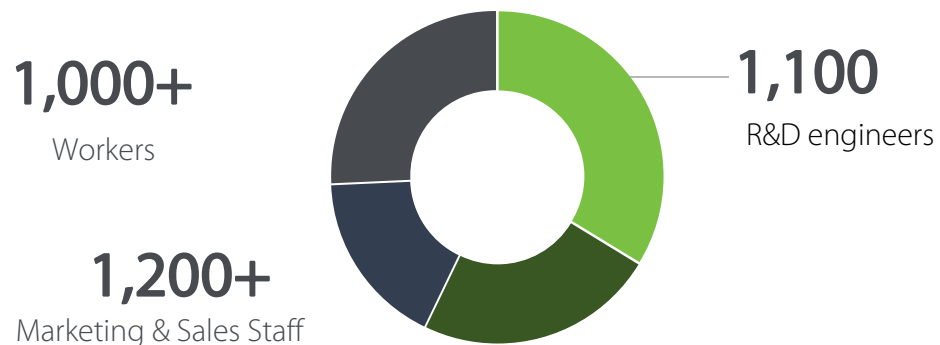
PQS:

We provide special quality control service for VIP customers.

Market Data

80+ Global Branch Offices and **3,800+** Employees

Number of Employees by Functions



Number of Foreign Employees **730**

Global Exhibitions **20+**
 Attracted Global Signed Clients **3,500+**

- Smart Education
- Smart Building
- Identity Verification
- Smart Finance
- Smart Office
- Smart Security

20+ Global Exhibitions



India



Chile



Colombia



Vietnam



CPSE



Nigeria



Dubai



Japan

30+ Overseas Branch offices



India



Panama



Vietnam



Malaysia



Europe



Mexico

Local Experience Room

USA



Singapore

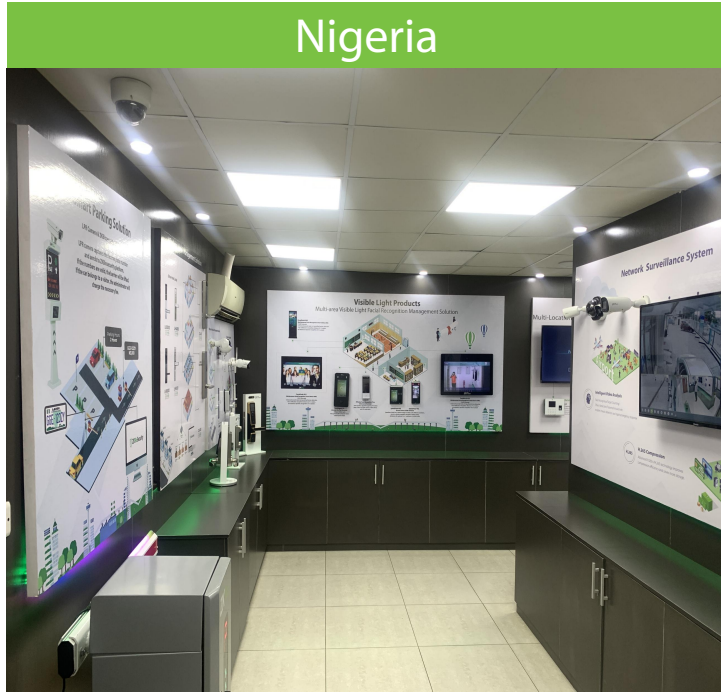


Spain



Local Experience Room

Nigeria



Vietnam



Dubai



04

Solutions & Cases

— ZKTeco provides richer solutions and create mutual enduring value. —



Access Control with Pandemic Prevention for a Major Metro System in Argentina

End User:

Argentina Metro System



ZKTeco **SpeedFace V5L [TI]** Facial Recognition Terminals have been deployed at the entrances of the metro stations.



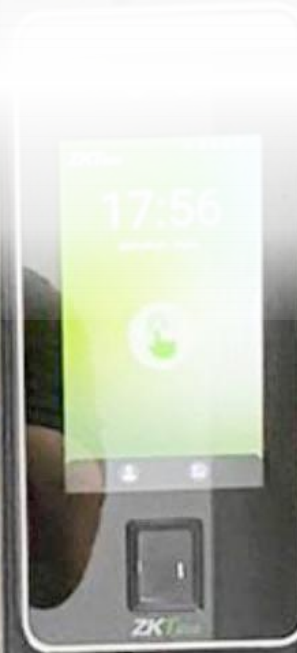
China Everbright Bank Hong Kong Branch Data Centre Security Management Solution

End User: China Everbright Bank, one of twelve Chinese joint-stock commercial banks.

Requirements:

- Integration with Existing Devices for Better Cost Effectiveness
- Real-time and Remote Monitoring for Security Everywhere
- Easy Visitor Management for Enhanced Work Efficiency
- Biometric Verification to Ensure Real Identity

Item List		
Access Controller	InBio 460	17
Access Control Terminal	SpeedFace V5L	1
Access Control Software	ZKBioSecurity	/



Entrance Control Management Solution with QR Code Ticketing for Ice Rink

End User:

The LOHAS, a key component of the monumental LOHAS Park property development project

Requirements:

- More Efficient Entrance Management
- Crowd Control Measure
- Preventing Repeated Illegal Entry
- Connection to Other System for better efficiency



Item List		
Access Control	Software	ZKBioSecurity
Entrance Control	Swing Barrier	SBTL5000
Entrance Control	swing Barrier	SBTL5200
Access Control	QR Code Reader	QR500
Access Control Software	Control Panel	InBio Pro 260
Access Control		ZKBioSecurity

A Customized Attendance Management Solution for Tunnel Operators



End User: The Eastern Harbour Tunnel, one of the three major cross-harbour tunnels in Hong Kong and is the longest one among them.

Requirements	Solution
Flexible Roster Arrangement	ZKBiosecurity is customized to be able to perform flexible roster management
Direct Excel Import	ZKBioSecurity is able to directly read Excel and perform roster management.
Enhancing Administration Efficiency	ZKBioSecurity is a web-based software which enables multi-person operation.
Reliable Biometric Verification Method	FaceDepot-7B & Horus-E1 offer high- performance facial recognition functions, and equipped with RFID card verification function
Verification Everywhere	Horus is a wireless device that enables portable work



Solutions:

ZKTeco's solution involves a total number of 1,000 units of Horus E1-FP and 100 units of G3 Hybrid Biometric Verification Time & Attendance Terminals, deployed in the various sites managed by ISS, with all staffs' personal information registered for verification and attendance taking.



System	Device Name	Device Model	Device Quantity
Time & Attendance	Hybrid Biometric Verification Terminal	Horus E1-FP	900(pcs)
	Hybrid Biometric Verification Terminal	G3	100(pcs)
	Software Platform	BioTime	N/A

Visitor Management Solution

for the Largest Bank in Turkey

Requirement:

- Precise Biometric Verification Method
- Multi-Permission Access Setting
- Over 680 doors securing five buildings distributed in two cities need to be managed

Solution | Items:



ZKBioSecurity 3.0
4300 Users
688 Doors



500 Pieces
ProID40E



300 Pieces
InBio Pro package



200 Pieces
FR1200



Security Inspection Case Study

Intergovernmental Conference in Morocco

Challenges :

As a remarkable event with 164 governments all around the world participating in the United Nations Conference, security would be under intense pressure.

Needs : Reliable Weapon Detection System

Instantly and effectively detect and recognize dangerous good including weapons in order to stop any potential threat to security.

Items:

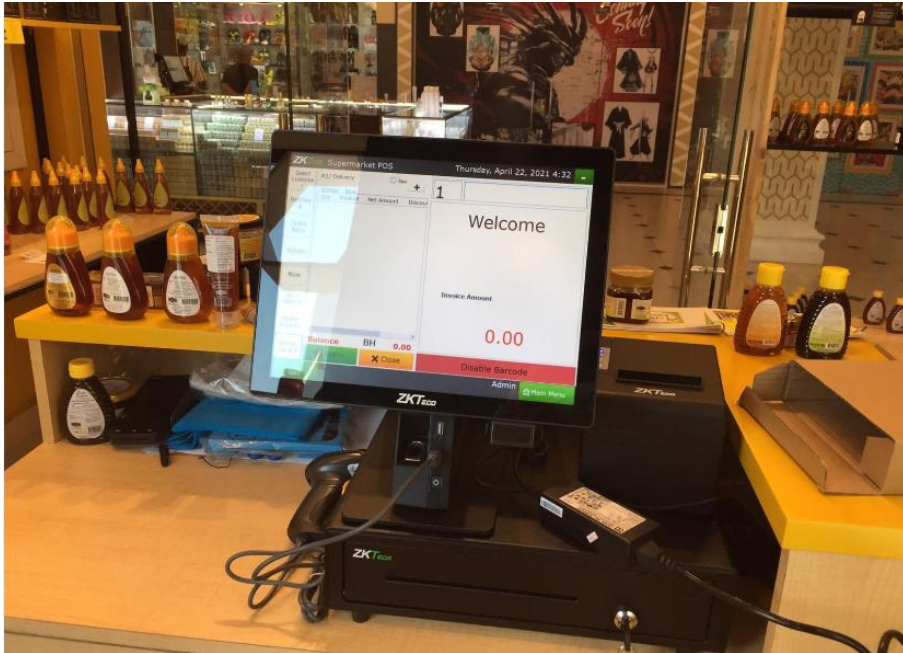
X-Ray Inspection System	ZKX10080
X-Ray Inspection System	ZKX5030 15 units
Walk-through Metal Detector	ZKD1065S 30 units



ZKX5030



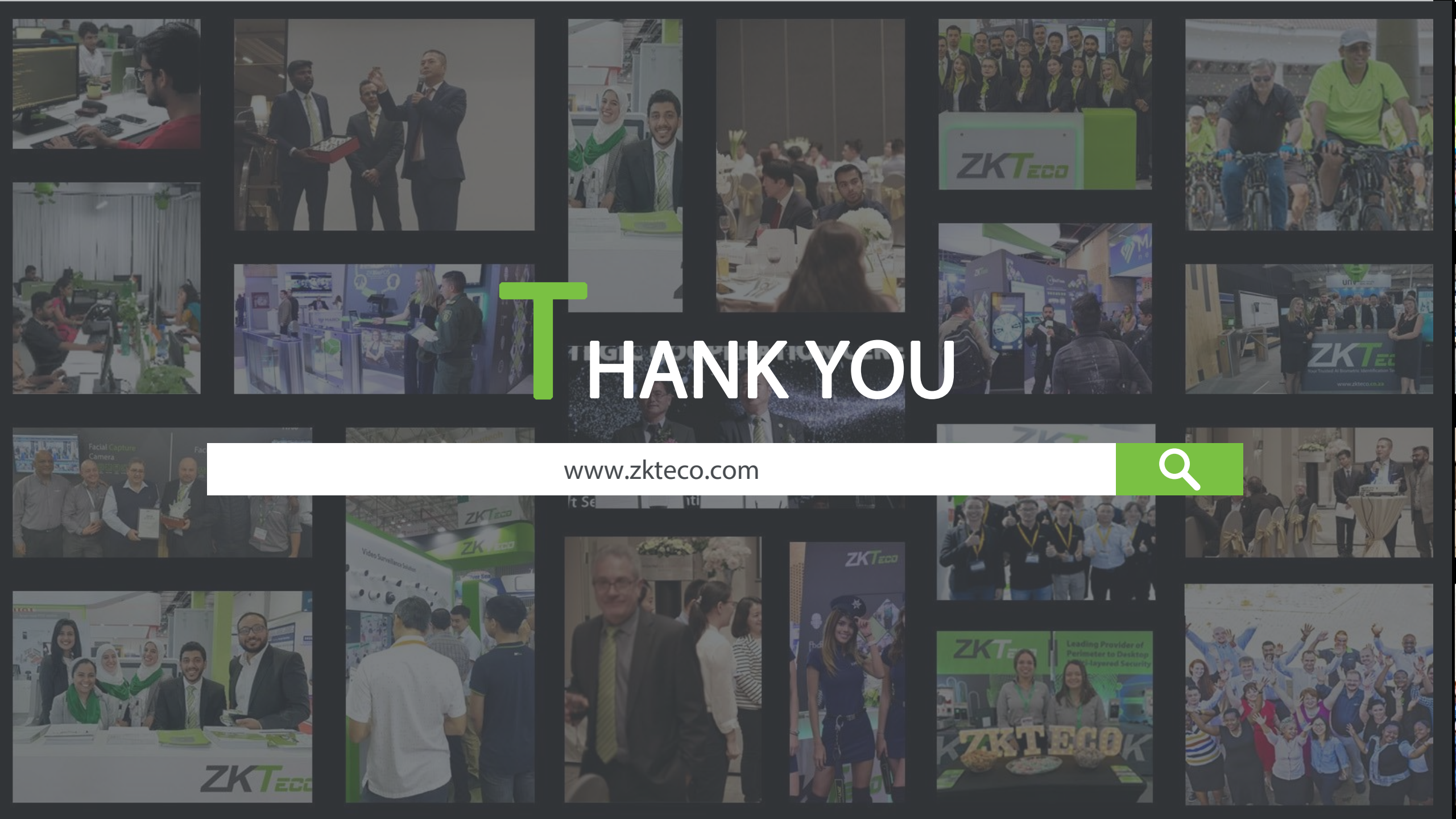
ZKTeco Smart POS Solution



Project: Honey chain store at Bahrain
Device: ZKTeco POS terminals and peripherals
Software: ZKPOS Retail
Model: ZKBio850 ZKP8002 ZKC0508 ZKB101



Project: Chain restaurant at Mexico
Device: ZKTeco POS terminals and peripherals
Software: Local software
Model: ZKBio930 ZKP8008



THANK YOU

www.zkteco.com

