



All-in-One Airport Safety & Security Solution

**Tailored intelligent solutions
to enhance security level and
protect company assets and
employees**

Contents

- **Visible Light Recognition**
- **Access Control Management**
- **Car Park Management**
- **X-Ray Metal Detector**
- **Entrance Control**
- **Web Based All-in-One Software**

Solution Airport

Car Park Management

Parking Barrier

PB3000

- The boom barrier can be raised and lowered smoothly and steadily
- Outer case and interior can be flexibly separated, convenient for maintenance and customization
- Simple installation - just to fix the barrier gate on floor and connect it to electricity

Entrance Control

LPRS1000

- Industry-leading LPR algorithm
- Automatic license plate recognition mode
- Parking management software

Automatic Sensing Parking Lock

Plock 2

- Auto sensing
- Remote control
- Photoelectric sensor
- Waterproof and dust proof
- High pressure resistance

Entrance Control

Flap Barrier

FBL2000

- Choice of reader (RFID or fingerprint)
- LCD on the flap barrier control board
- SUS304 stainless steel

X Ray Detector

X-Ray Luggage Inspection

ZKX10080

- Adjustable belt speed
- Fingerprint console board
- Video surveillance

Walk Through Metal Detector

ZK-D4330

- 33 detection zones
- 7"LCD HD display interface
- Remote control
- Simple installation and use

Handheld Metal Detector

ZK-D180

- Compact size, portable
- Visualize metal detection indicator
- Rechargeable battery and charger
- High sensitivity, able to detect an object as small as a stamp

Visible Light Recognition & Access Control Management

Visible Light Recognition

G4

- Proactive Facial Recognition
- New Height of Anti-Spoofing
- Speedy Recognition
- Wide Pose Angle Acceptance
- Touchless for Better Hygiene

Multi-Biometric Time Attendance & Access Control Terminal

G3

- Multiple verification modes: Face / fingerprint / card / password
- Dry, wet and rough fingers
- SilkID fingerprint sensor

Multi-Biometric Access Control Terminal

ProBio

- Multiple verification modes: Face / fingerprint / card / password
- Dry, wet and rough fingers
- SilkID fingerprint sensor
- Built In camera: Event snapshot and user photo



Web Based All-In-One Software



Professional Security Software

ZKBioSecurity

- All-In-One solution (Access control, time attendance, patrol, hotel, video surveillance, elevator and visitor)
- Simple structure and smooth workflow
- Multi-door management capacity (Up to 2,000 doors in single server and 8,000 doors in multi-server)





Visible Light Recognition

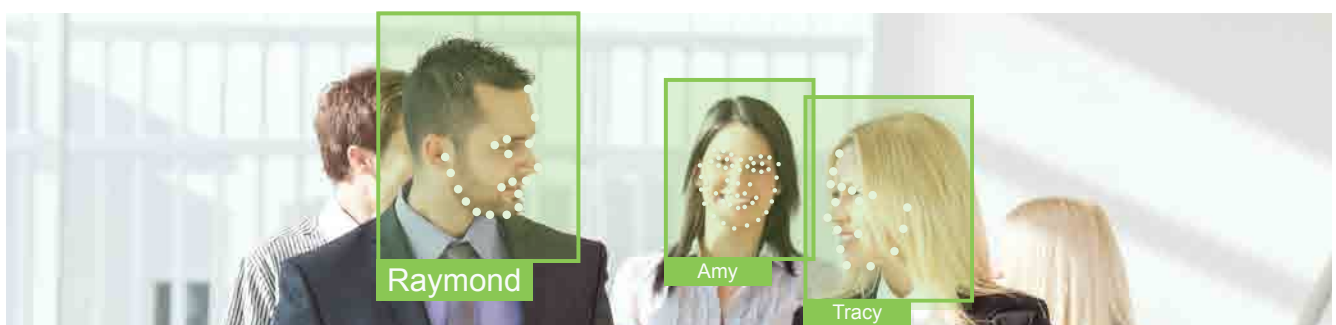
Proactive Facial Recognition

Visible Light Recognition is a proactive facial recognition device, users no longer need to stand steadily in front of camera. When users pass through the specific area, they are possibly recognized automatically.



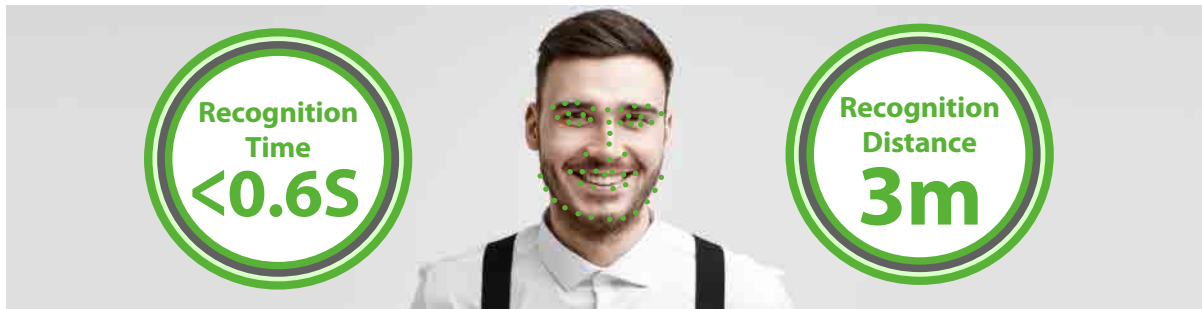
Opening doors without standing in front of the camera

With the newest visible light recognition technology, if users would like to get access to the authorized area, they are no longer required to get close to the terminal and stop by for recognition, as the system is able to automatically recognize and track faces in video.



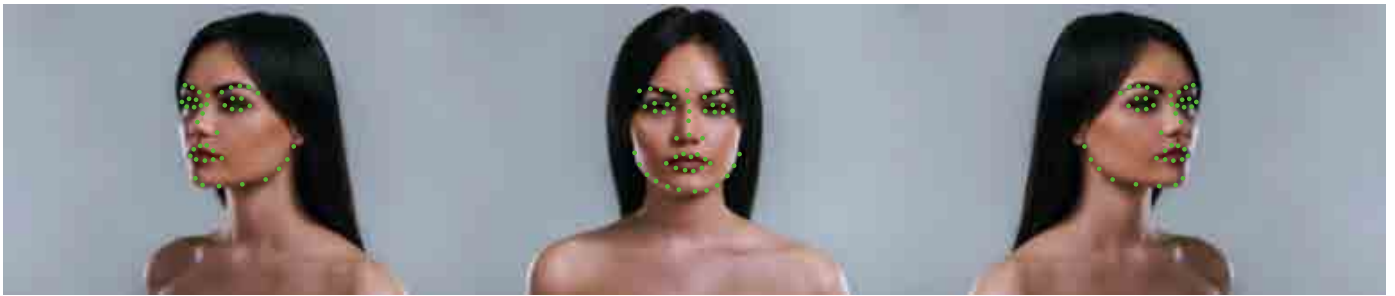
Speedy Recognition

The visible light facial recognition is way faster than the previous near Infrared facial recognition, and the recognition distance has been greatly extended up to 3 meters, 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.

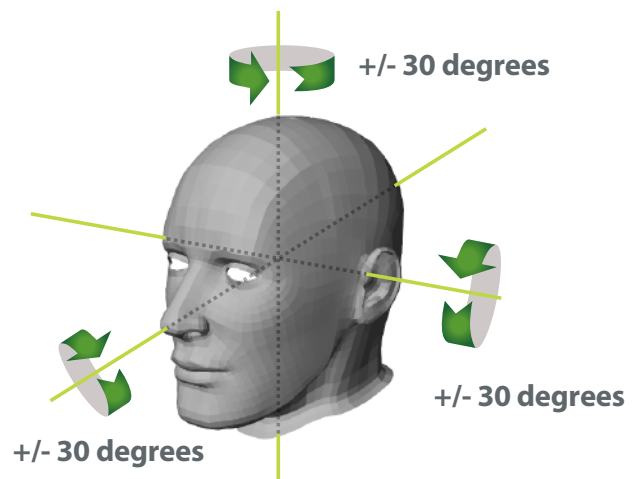
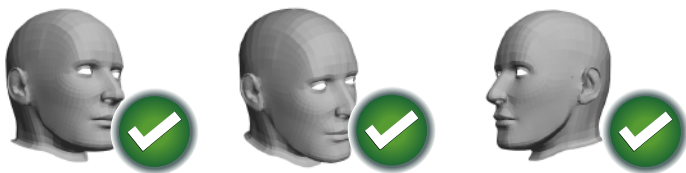


Wide pose angle acceptance

Deep learning technology enriched the pose angle of the recognition up to 30 degree in all angles such as pitch, row and yaw.

Extra wide angle recognition (+/- 30 degrees)

While most of algorithms only support 15-degree angle facial recognition, ZKBioFace supports 30-degree angle facial recognition.



Make-up, glasses and different styling acceptance

Delighted by deep learning technology, the recognition technology now able to recognize human from the fundamental pixel level, which greatly enlarged the tolerance of make-up, glasses and styling.



X-Ray Metal Detector

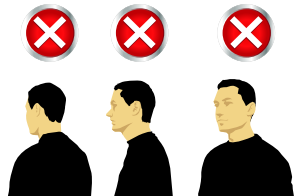
Visual Attention Detection for X-Ray Machine

X-ray-aided screening systems are one of the most commonly adopted security measures at checkpoints and building entrances for decades. Yet, inspectors who are employed to screen the personal belongings through the system's monitor and further initiate more thorough security checks (e.g. hand searches) at the point of visual inspection may not be always paying attention to the images displayed on the monitor. ZKTeco has developed a function which helps determine if the inspector is looking at the monitor. If not, the system will alert you until the inspector faces the monitor again.



ZKTeco could make sure the inspector is looking at the monitor.

Alert! Alert! Alert!



If the inspector is not looking at the monitor, the system will alert you until the inspector faces the monitor again.

Energy Saving for X-Ray Machine

The machines are energy-efficient. The X-ray generator is only activated when the sensor identifies an object's presence on the conveyor belt; otherwise, the conveyor belt will stop moving.

If there is no luggage on the conveyor belt, the machine will stop operating.

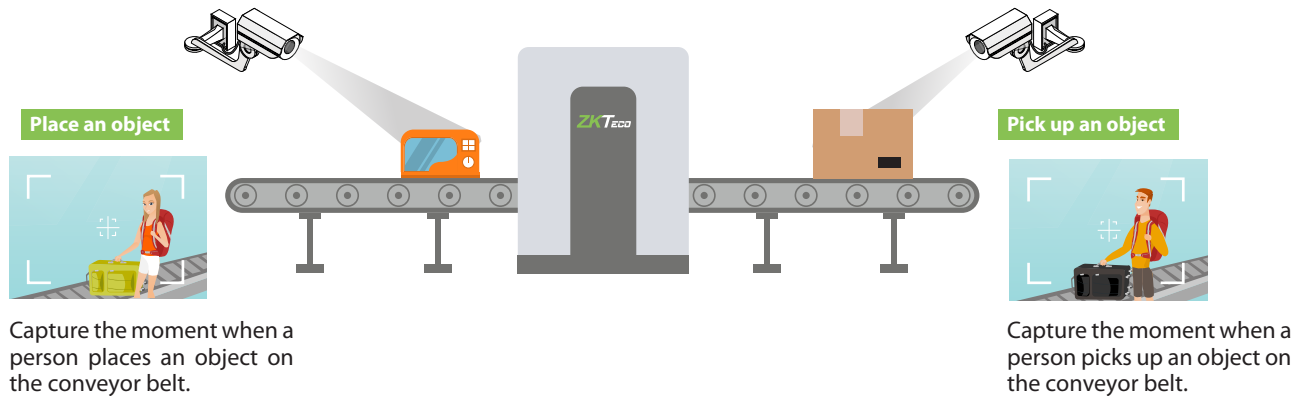


If there is luggage on the conveyor belt, the machine will operate automatically.



Who Picks Up the Luggage?

The system will take pictures for records when a traveler placed his/her luggage on the conveyor belt from one side and when he/ she picked up the luggage from the other side to ensure each traveller collects his/her own belongings.



Inspection of Chassis

Such inspection is to detect threats such as bombs that can easily be hidden underneath vehicles. As a vehicle arrives the checkpoint and gets over the imaging unit, cameras installed will capture images of the undercarriage and transmit them to the control unit which displays them on a monitor. It can be located in close proximity to the checkpoint or the exit area.



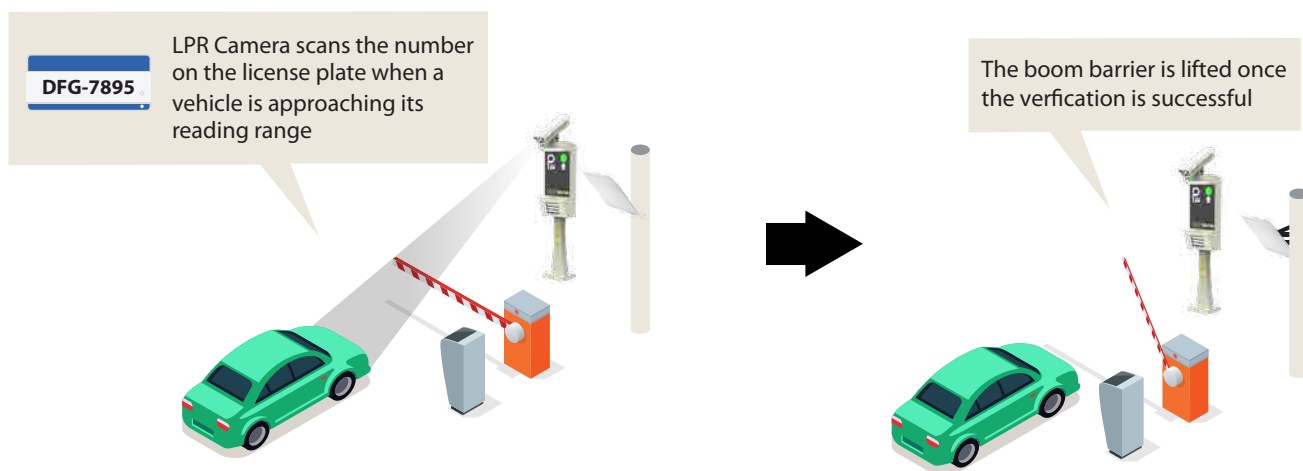
ZK-VSCN100
Portable chassis inspection system



Car Park Management

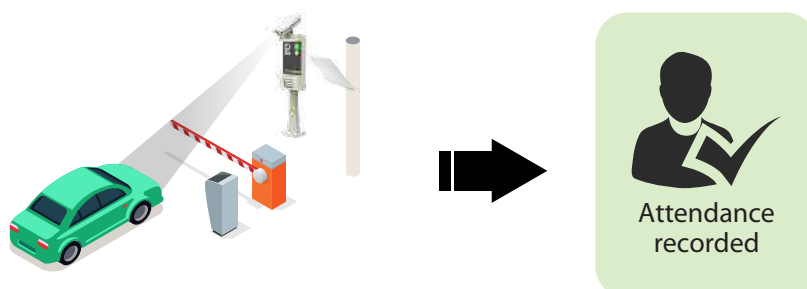
Automatic License Plates Verification (with LPR camera)

LPR technology is an application of computer video image recognition technology in license plate identification area. Its operation starts when the vehicle is located at the entrance of the parking lot, the LPR camera will scan the license plate characters, and its recognition technology will identify the license plate number, color and other information. If the number on the license plate is valid, the car park barrier will lift for access; otherwise, no access will be allowed.



Access Control and LPR Attendance Tracking

Different from most of the time attendance system in the market, ZKBioSecurity can be linked with access control terminal(s), control panel(s) and LPR terminal(s), and allow users to retrieve access records for calculation.



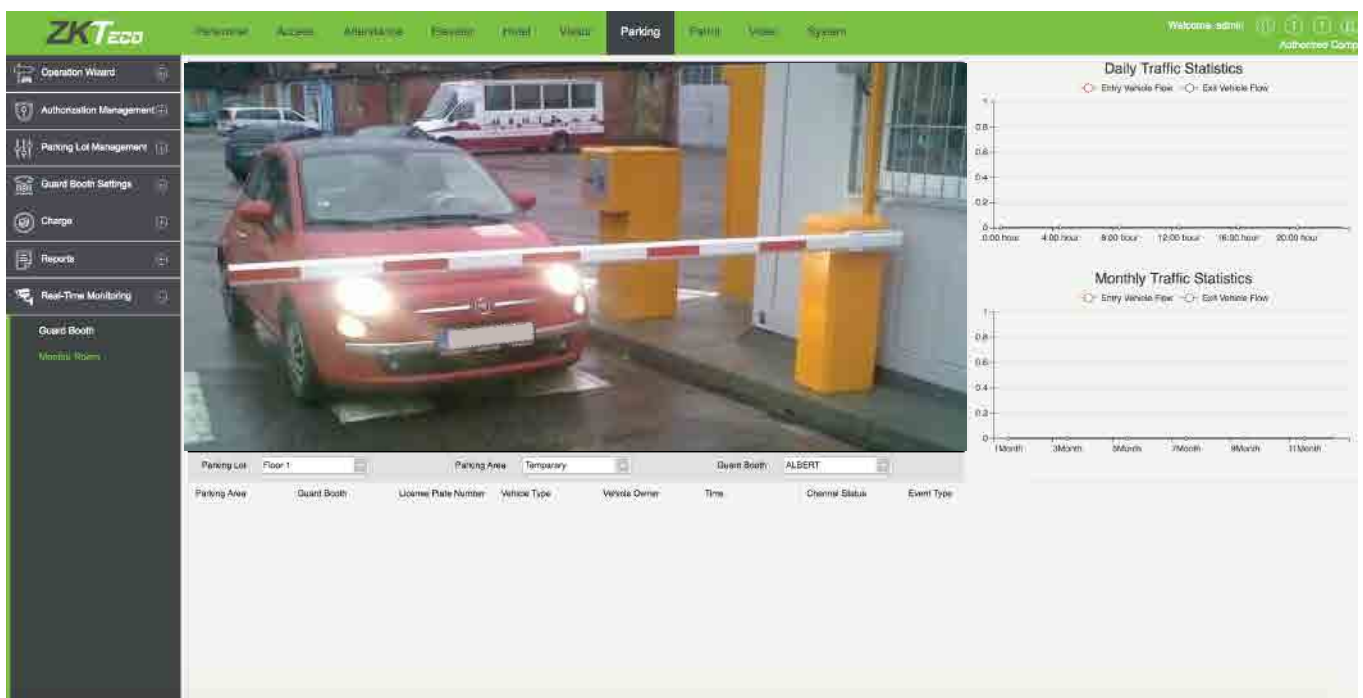
Smart Parking Lock

Plock 2 disallows drivers to park at a specific parking spot unless the vehicle has the authority to get access to the parking lot. The arm of Plock 2 can rotate back and forth when the parking lock receives signals from the sensor.



Real Time Parking Lot Monitoring

It provides an additional function for administrators to have a real time monitoring in the monitor room, you can check video images and entrance and exit information of all guard booths in all parking lots.





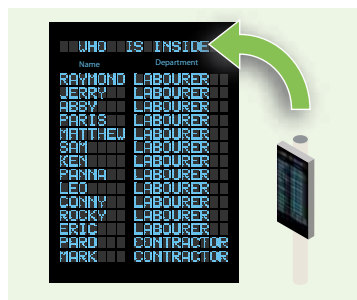
Entrance Control Management

"Who is inside" information Shown on the LED

ZKBioSecurity provides a programmable LED / LCD display function to show real time and editable "who is inside" personnel information. It allows for users to generate reports showing where card holders are within a facility. As a card holder swipes, he/she will be granted access to the area and his/her name and location will be simultaneously shown on the connected LCD screen.



LED / LCD display to show who is inside the specific area



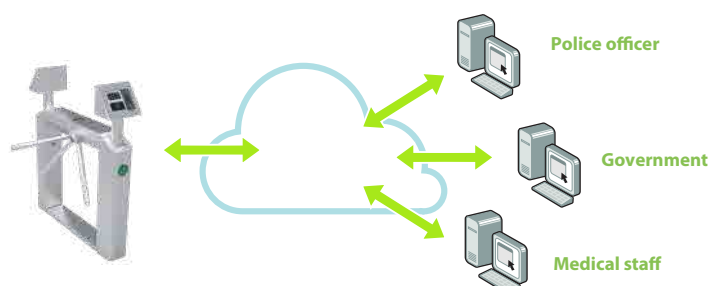
LED Display



LCD Display

Cloud Service and Connection with Third Party Systems

ZKTeco provides a software development kit(SDK) of the entrance control which allows user to connect the product with third party applications for further software development. When people go through the turnstile, electronic entry records will be stored in the cloud. Third parties, such as police officers, medical staff, will know who is inside the construction site.





Access Control Management

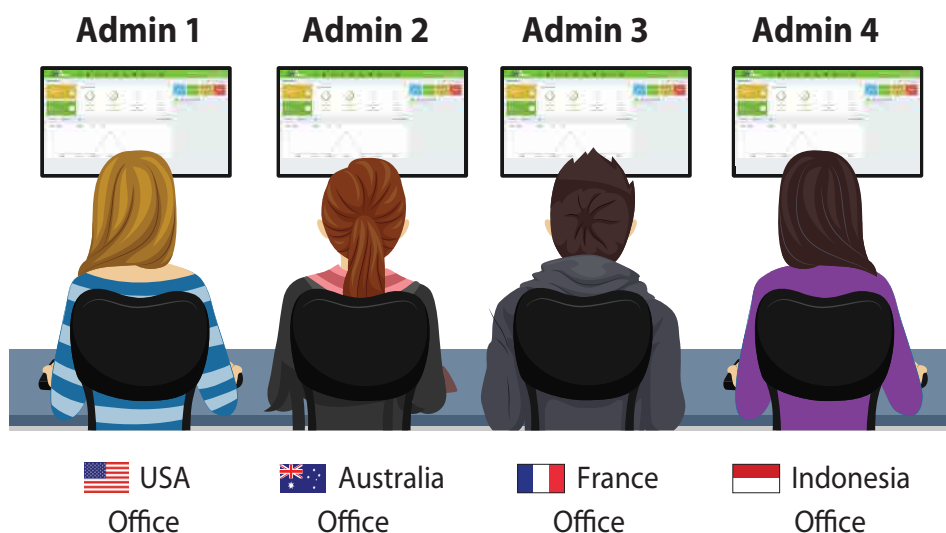
Employee Self Log-In

Employee Self-Log-in is a cutting-edge function for employees to enter the server to perform job-related functions anywhere and anytime. An employee can up-date personal information, leave an application, submit and exception, including OT, manual punch-in, shift adjustment, etc., and request a self-report inquiry.



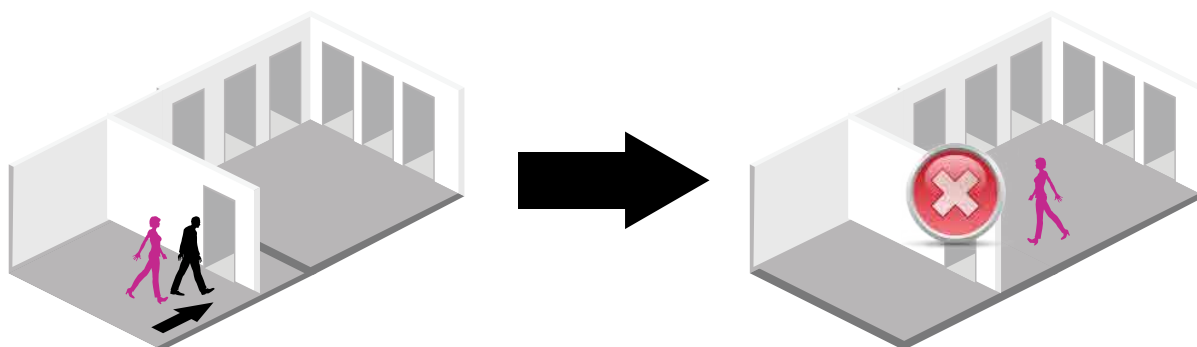
Multi-Location

Users can access the centralized system anywhere by their web browser to remotely manage thousands of standalone terminals and controllers under wide area network (WAN)



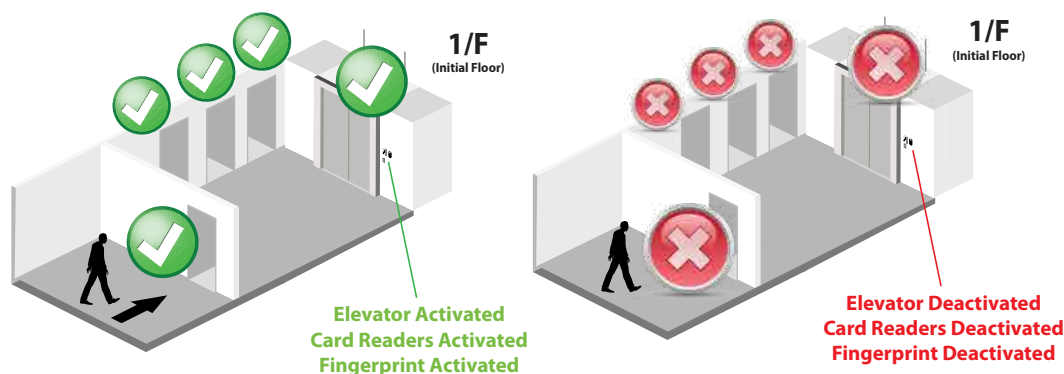
Global Anti-Passback

Global Anti-Passback is a security function designed to eliminate authorized and/or unauthorized personnel from going into area without presenting proper credentials (i.e. tail-gating). In the event a person enters a secure area without authentication, as the red colored person in the image below, that person will be detained in the secure area, even if they have access rights to the area. Administrative personnel will have to override the system to allow the unauthorized person to exit then enter the area in the future.



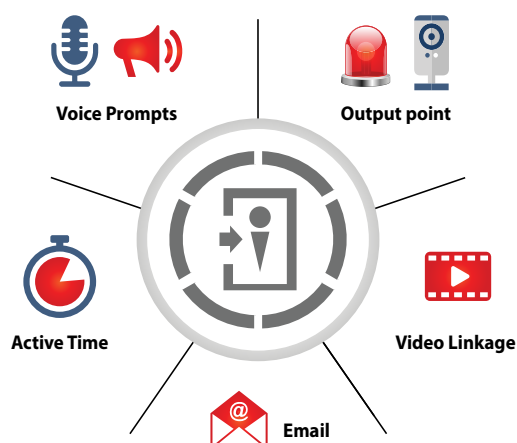
Global Interlock

Global Interlock is an advanced security function that heightens the security level by interacting with different security areas. It is designed to prevent persons from opening more than one door at a time even, if the persons have multiple door access authorities. It is able to precisely appoint access authorization including activations of access authorization of specific doors when the correlated doors are locked properly. Most commonly used in man-traps.



Global Linkage

One of the highlighted functions of the ZKBioSecurity is the Global Linkage. It is able to automate system cross platform interactive functions and notifications system. There are multiple tiers to the alert process including relay inputs and outputs, video recording and photo capture (ONVIF), active time, email notification and linkage voice prompts.



The Leader Of Security And Time Management Solution

