

# ZKBio CVSecurity

All-in-One Biometric Security Advanced Solutions



ZKBio CVSecurity provides a comprehensive web-based security platform with the adoption of hybrid biometric and computer vision technology. It contains multiple modules: Personnel, Time & Attendance, Access Control, Visitor Management, Parking, Elevator Control, FaceKiosk, Intelligent Video Management, Mask and Temperature Detection Module, Online/Offline Consumption, Patrol, Intelligent Scenes, Operation Center, Service Center, and other smart sub-systems.

The platform adopts micro-service development framework with robust system performance characteristics, such as high availability, scalable modules, fully secure communication, and solid third-party integration scalability.

By taking full advantage of our extensive experience in access control industry, ZKTeco integrates video surveillance and intelligent analysis applications into the system, creating a system-wide & all-in-one biometric security management platform to guarantee high quality of security service and safeguard the public's lives and possessions.

## Features

- |                                |  |  |  |
|--------------------------------|--|--|--|
| Web Application                | Multi-point Deployment                 | Flexible 3rd-Party System Integration  | High Availability ZKBio HA Integration       |
| Visual Data Panel              | Scramble(Dynamic) QR Code Credential   | Mask & Temperature Detection Supported | Visible Light Facial Recognition             |
| Video Patro                    | Global Anti-Passback and Linkage       | Entrance Terminal Management           | LPR Camera for Parking                       |
| Flexible Elevator Control      | Smooth and Advanced Visitor Management | Self-Service Visitor Management        | WhatsApp, LINE, SMS, Amazon SNS Notification |
| FaceKiosk Information Screen   | Time & Attendance                      | Professional Video Management System   | Intelligent Video Linkage                    |
| Personal Trajectory            | Intelligent Target Search              | Smart Camera Perimeter Protection      | People Counting                              |
| Smart Camera Tailing Detection | Smart Camera Personnel Control         | Smart Camera Attendance Checking       | GIS Map                                      |
| Microsoft Active Directory     | Card Printer                           | OCR                                    | Consumption Management (Online & Offline)    |

## ZKBio CVSecurity Key Features:

### Intelligent Scene Module:

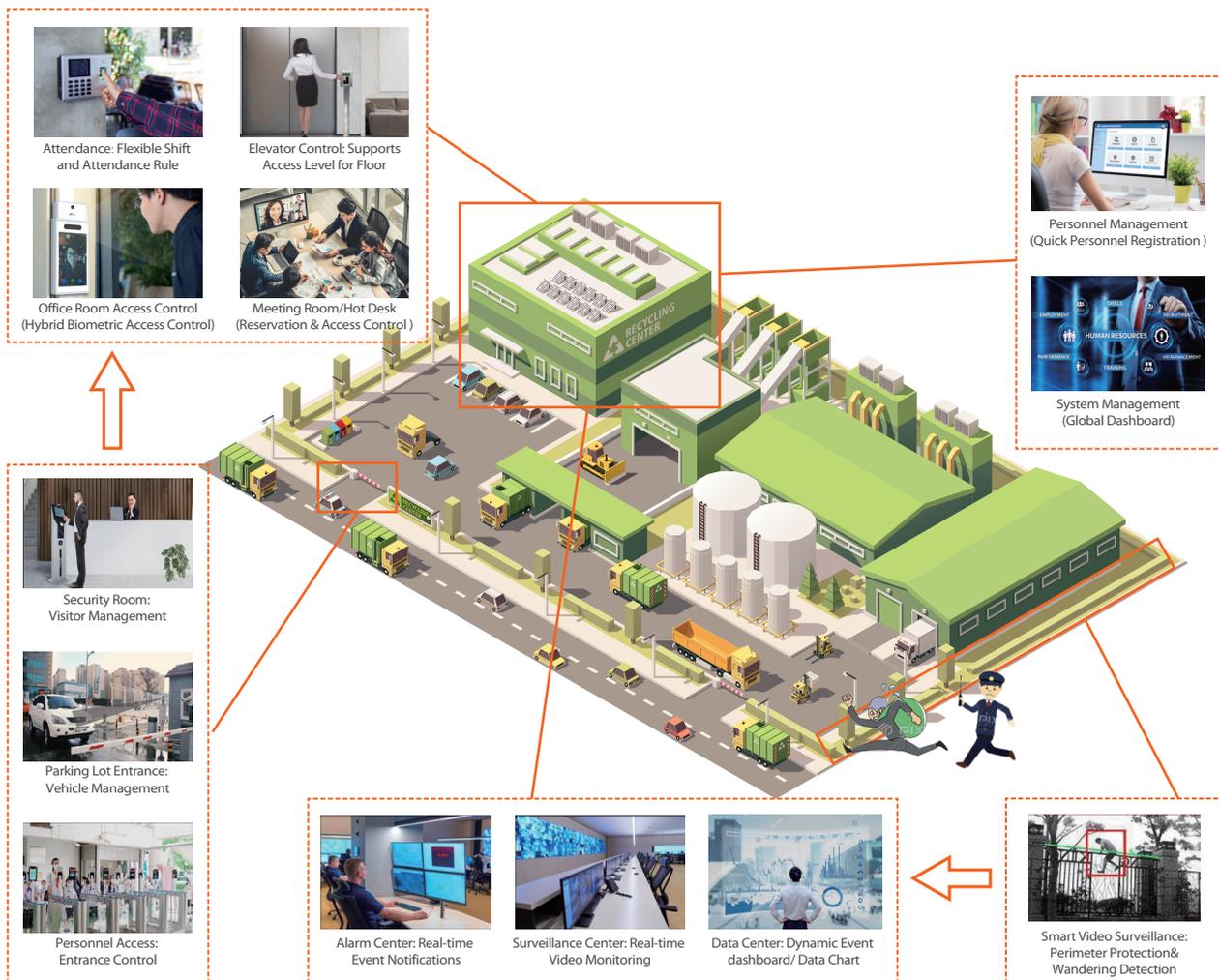
- Tailing detection: Facial recognition record can cross-check with access control record to validate any personnel enter without access control record.
- Perimeter Protection Function: smart video analysis with line crossing detection to detect anyone crossing the perimeter with real-time snapshots or short videos for crossed line objects, an intelligent dashboard and detailed summary reports
- Personnel control function: Facial recognition function cross-check with allowed list, prohibited list and strangers to prompt notifications, alerts, real-time snapshot and summary reports and detailed summary reports.
- Attendance Checking Function: Real-time checking personnel attendance in the delegated area, intelligent dashboard
- People counting: Dynamically count the number of people in the area, and alarm when the number of people reaches the set value
- "Advanced smart target search" in the intelligent scene module provide more compensative functions and supports the full-platform event search of multi-credential such as, person's name, ID number, reverse image search, gender, age, mask, glasses, jacket colour, and trousers colour, and generating detail person trajectory reports.

### Intelligent Video Module:

- "Crowd detection" includes crowd density detection, crowd movement detection and heat maps.
- "Smart target search" supports searching targets by gender, age, hairstyle, mask, glasses, hat.
- "Smart vehicle detection" supports vehicle search and detection by multi-credential such as, plate number, vehicle type, vehicle brand, vehicle colour, etc.
- Supports behaviour analysis such as line crossing detection, intrusion detection, object left detection, object remove detection, region entrance, region exiting, rapid movement, wandering detection, and alarm linkage for abnormal behaviour.
- Supports intelligent reserve image search function.
- Maximum supports 1024 video channels, license-free for the first 64 channels, support 16 channels real-time playback simultaneously.

### More Modules Features:

- Standard access control Features and advanced professional access control functions (Global Anti-Passback, Global Linkage, Global Interlock, Personnel validity period and frequency management, etc.)
- Powerful web-based time and attendance management module that can handle most of the most complicated circumstances: flexible shifts, multi-level OT, cross day shift, and online leave application with multi-level approval; View absentees in real-time, Support access control, Entrance Control, Parking, video recognition data as attendance records.
- Provides the most secure, scalable, versatile, and affordable access control solution available for elevators; supporting elevator control in a building with a maximum of 58 stories.
- Advanced visitor management module, improving the professionalism of the enrolment and visitor check-in process. It streamlines the enrolment process with pre-registration or self-registration options and allows users to create watch lists and screen against unwanted guests.
- Automatic and intelligent vehicle management, effectively and accurately monitoring and managing vehicles at all exits and entrances using different identity assessment criteria.
- Consumption module (Offline mode) is a multi-functional consumption management software module designed for multi-industry uses (retail, food and beverage, grocery, food court, etc.) to speed up services and increase operational efficiency.
- Online guard patrol module provides a new and cost-effective way to accomplish guard patrol management, guards will start and finish security patrolling at the arranged time, At the same time, video patrol is supported, and the site security inspection is quickly completed through the camera.
- Professional entrance control module supports online remote entrance terminal configuration and management to improve its maintenance efficiency.
- Temperature detection module offers an intelligent dashboard with detailed temperature and mask statistics in a quick view and reports.



## Software Specifications

Current Version	ZKBio CVSecurity 5.0.0_R
Door Capacity	2,000
User Capacity	30,000
Supported OS	Windows 7/ 8 / 8.1 / 10 / 11 server 2008/ 2012/ 2016/ 2019 Linux Ubuntu® 20.04
Database	PostgreSQL (Default), MS SQL Server, Oracle (Optional)
Suggested Browsers	IE 11+/ Firefox 27+/ Chrome 33+ /Edge

### \* Minimum PC Requirements

CPU	Intel(R) Core (TM) i5 1035 @ 2.6GHz or Above
Memory	8GB or above
Storage	30GB free space or larger (NFTS recommended)
Monitor Resolution	1920*1080 or above

### \* Maxmum PC Requirements

CPU	Intel(R) Core (TM) i7 1068 @ 3.6GHz or Above
Memory	16GB or above
Storage	200GB free space or larger (NFTS recommended)
Monitor Resolution	1920*1080 or above

\* Please refer to the server configuration suggestion file according to your requirements.

# ZKBio CVSecurity Server



## Why Linux Based server

- **Dedicated Linux Based Server**  
A genuine Linux based server designed for ZKBio CVSecurity provides higher stability, better performance, higher efficiency
- **Installation-free**  
Pre-installation greatly enhances installation efficiency and reduces on-site installation & maintenance cost
- **Cost-effective**  
Comes with a free-of-charge onboard basic license and serves with one time free-of-charge remote software upgrade and module expansion services.
- **Compatible Guarantee**  
The Linux based ZKBio CVSecurity server has been fully finetuned by the ZKTeco technical team to guarantee user has the best user-experience
- **Extra-long Warranty Period**  
Besides ZKBio CVSecurity comes with 1-year software warranty, Dell as the hardware provider of ZKBio CVSecurity Linux Based Server offers 3-years worldwide warranty

# Compares the configurations of different servers

Type	ZKBio CVSecurity Server-25/64	ZKBio Security CVServer-50/64	ZKBio Security CVServer-100/64
CPU	Intel® Pentium® G6405 (4 MB Cache, 2 Cores, 4 Threads, 4.1 GHz, 58 W)	Intel® Pentium® G6405 (4 MB Cache, 2 Cores, 4 Threads, 4.1 GHz, 58 W)	10th Generation Intel® CoRE™ I3-10105 (4-Core, 6MB Cache, 3.7GHz to 4.4GHz, 65W)
Operating Systems	Ubuntu® 20.04		
Memory	1x8GB, 2666 MHz DDR4 non ECC memory	1x8GB, 2666 MHz DDR4 non ECC memory	1x8GB, 2666 MHz DDR4 non ECC memory
Graphics Card	Integrated Intel® HD Graphics 610	Integrated Intel® HD Graphics 610	Integrated Intel® HD Graphics 630
Storage	M.2 128GB PCIe NVMe Class 35 SSD	M.2 128GB PCIe NVMe Class 35 SSD	M.2 128GB PCIe NVMe Class 35 SSD
Supported Devices	Standard:64 Cameras+25 Doors Maxium:1024 Video devices+100 Doors Total Device: 200(Including access control devices, cameras, elevator controllers, time attendance devices, self-service registration devices, consumption devices, and entrance barriers)	Standard:64 Cameras+50 Doors Maxium:1024 Video devices+100 Doors Total Device: 200(Including access control devices, cameras, elevator controllers, time attendance devices, self-service registration devices, consumption devices, and entrance barriers)	Standard:64 Cameras+100 Doors Maxium:1024 Video devices+250 Doors Total Device: 500(Including access control devices, cameras, elevator controllers, time attendance devices, self-service registration devices, consumption devices, and entrance barriers)
Warranty	Hardware: 36 months (Dell Worldwide Support) Software: 12 months (ZKTeco Support)		

# System Topology

