

VN3A-UNI2

Smart IoT Integrated Management Server



Features

- Powerful access: Connect and manage 2,000 video channels.
- Powerful management: Connect and manage IPC, NVR, Smart Box, video wall controller, face detection access control terminal, access controller, video intercom device, entrance & exit ANPR camera, visitor management terminal, radar device, and third-party device (alarm controller, access controller), etc.
- Powerful storage: 16 x SATA disks, supports recording backup.
- Strong compatibility: Onvif, RTSP
- High expandability: Primary/replica device management expansion, forwarding and storage capacity expansion
- Rich functionalities: Basic functions including live view, playback, group sequence, view, video wall, e-map, 3D map, two-way audio, audio broadcast, and alarm linkage; expanded functions such as access control, visitor management, vehicle access management, personnel management, people counting, parking management, alarm system, and O&M.
- Flexible access: PC client (C/S, B/S), mobile client (iOS, Android).
- Exceptional stability: Linux system, dual-BIOS, dual power modules
- Security: Network fault tolerance, load balance, multi-IP address, secure password, IP address filtering.
- Sophisticated O&M: Server status, device/channel online status, log search, etc.
- Interfaces: 4 x GE ports, 24 x alarm input, 8 x alarm output, 2 x USB 2.0, 2 x USB 3.0, 2 x HDMI, 1 x VGA.

Specifications

Model	VN3A-UNI2
Resource Management	
Encoding Devices	1000
Video Channels	2000
Access Control Devices	300
Video Intercom Devices (door station)	300
Video Intercom Devices (indoor station)	2000
Smart Channels (including face detection, LPR, multi-target detection)	500
Cloud Devices	256
Onvif Devices	1000
Alarm Controllers	800
3rd-party integration, built-in DA	Max. 3 sets, including 2 sets of SDK①
Storage Device	
IPSAN	10
Event/Alarm(single item)	
Events/Alarms without Images per Second	150
Events/Alarms with Images per Second	15
Push Events/Alarms to Client per Second	15
Organization	
Organizations	1000
Organization Levels	26
User and Role	
Roles	500
Users	2000
Maximum Number of Roles per User	32
Concurrent Online Users	50
Data Storage	
Alarm Logs	10000000
Operation Logs (retention period)	6 months
Access Control Events	10000000
People Counting.	10000000

Visitor Records	10000000
Attendance Records	10000000
Vehicle Passing Records	10000000
Call Records.	10000000
Personnel	
Persons	50000
Vehicle and Parking	
Vehicles	10000
Vehicle Libraries	32
Parking Lots	4
Entrances & Exits	8
Lanes	16
Streaming Media	
Receiving Bandwidth (Mbps)	650
Forwarding Bandwidth (Mbps)	650
Storage Bandwidth (Mbps)	650
Concurrent Central Storage Channels	250
Concurrent Central Playback Channels	30
P2P	
P2P Receiving Bandwidth (Mbps)	250
P2P Forwarding Bandwidth (Mbps)	250
User Management	
User Login	Multi-client login Strong password policy, mandatory password reset at first login Requires users to read the privacy agreement at login
Login Management	Limit failed login attempts; block the IP address after 5 consecutive failed login attempts, with automatic unlock after 5 minutes
Strong Password Verification	Password strength enforcement; strong passwords required for cross-subnet access, with configurable policy (enable/disable)
Data Dashboard	Customizable titles and functional modules; supports full-screen display mode
Custom Menus	A user can customize menu display order and content within the scope of his/her menu permissions Add third-party apps, including embedded programs (URL) and embedded webpage (URL)
Service Agreement	Privacy Policy, Cloud Access Privacy Agreement User confirmation is required when enabling cloud-edge features; users who decline can still use functions independently.
Advanced Feature Configuration	Enable or disable system functional modules Customizable automatic client lock timeout Customizable alarm name

	Restore default settings Customizable logo, including custom logo, background, and name on the login page, homepage, and top navigation bar Software theme switching: dark mode / light mode / custom color Replaceable software background image
Third-party Applications	Supports adding third-party clients or web pages as sub-modules within the software
User Management	Add,edit, delete, search users Sync user information from Windows AD domain View user list Assign one or more roles to a user Configure user priority for PTZ control Reset passwords for other users (only available to admin) Bind/unbind roles to/from users Lock/unblock user accounts
Role Management	Add,edit, delete, search roles Configure function access permissions; a role can only see the allowed functions/menus Configure resource access permissions; a role can only see the allowed resources
Change Password	Allows users to change their own password Password recovery via security questions; preset security questions must be answered correctly to reset the password
Retrieve Password	Retrieve password via mobile phone number (China) or email address (outside China)
Device Resource Management	
Organization Management	Add, edit, delete, search organizations Total up to 26 levels (local domain and external domain)
Access Protocol	Private protocol and Onvif protocol
Access Methods	Device access via IP+Port, DDNS+Port, star4live, Device access via UNP
Device Types.	LAN devices: IPC, NVR, storage device, face detection access control terminal, video wall controller, entrance & exit ANPR camera, radar, Smart Box, video intercom device, alarm controller Add, delete, edit, search devices Batch change device/channel names View reasons for device offline status Cloud devices: IPC, NVR, face detection access control terminal
Room Management	
Community Management	Add, edit, delete, search communities, buildings, units, and rooms Bind residents with rooms, including owners and tenants
Building Management	Add, edit, delete, search buildings
Unit Management	Add, edit, delete, search units
Room Management	Add, edit, delete, search rooms Bind residents with rooms
Function Configuration	
License Management	Activate license

	Export host file; import and view license info Deactivate license
Client configuration	Enable/disable pop-up alarm window
Switch Language	Choose client language (Chinese / English)
Configuration Wizard	Configure which setup wizard modules appear on the homepage
Customer Service	View customer service phone number
Help Center	User manual View system notices, including privacy policy and open source notice View system version information
Storage Configuration	
Platform Storage Configuration	Add, edit, delete, search (including batch operations) storage schedules; schedule configuration includes: storage location, storage stream, storage policy, and retention period
Camera Storage Info Management	Add, delete, edit, search video channel storage configuration (excluding cloud device, UNP device)
Recording Backup	Configure manual backup for video channels Configured scheduled backup for video channels Start/stop central recording
Storage Schedule Management	View, delete, start, stop storage schedule
Backup Task	Start, stop, delete, refresh backup tasks View the progress of ongoing video backups Retry and resume backup tasks
Backup Configuration	Add, edit, delete, search (including batch operations) backup schedules; backup schedule configuration includes: storage location, storage stream, storage policy, and retention period
E-map	
Map Type	Supports two modes: image map and GIS online map Image map: JPEG, JPG, and BMP formats, maximum resolution 8190*8190 GIS map 3D map: 3D/2.5D models support gltf and 3dtiles formats, maximum file size 512MB
Map Operations	View live video/recording/image/alarm info of devices on the map; filter alarms by alarm level, alarm type View device status on the map Search, locate devices on the map View alarm statistics of the day Choose a camera on the map to view live video of the 6 cameras closest to the selected camera; grid tracking during live view/playback
Service Configuration	
Platform Time Configuration	Support UTC timezone configuration Allows manual modification of system time Configure date and time formats (options include: YYYY-MM-DD; MM-DD-YYYY; DD-MM-YYYY)
Holiday Management	Add, edit, search, delete holidays

	Maximum duration for a single holiday is 30 days
Email Configuration	When enabled, requires configuration of: username, password, SMTP server, encryption type, SMTP port, sender address, and recipient address
Temperature	Switch temperature unit: Celsius/Fahrenheit
Data Sync Configuration	Specify access control devices to sync access records to a third-party database (customizable database address, port, etc.) Option to include or exclude failed verification records Configurable to automatically re-sync once per hour Enable/disable automatic retransmission of failed data sync attempts
Video Intercom	Configure video intercom ringing duration (40–60 seconds)
Face Data Sync	Configure sync policy: sync feature data only, sync image and feature data Configure face image validation during enrollment
Automatic Time Sync	Supports automatic server time synchronization settings; configurable sync interval to push server time to devices
Alarm Input/Output Configuration	Supports filtering by alarm input and alarm output Supports batch configuration of alarm types for alarm input/output channels
Card Attributes	Supports configuring alarm time attributes for pedestrians, faces, motor vehicles, and non-motor vehicles
Media Service Configuration	
PTZ Control Configuration	PTZ release configuration (default: 300 seconds; range: 30–3600 seconds) PTZ preemption policy configuration: New requester takes control Priority + First requester takes control Priority + New requester takes control
Disk Configuration	
Local Disk	Local disk, disk status (normal, abnormal, offline, or partition does not meet configuration requirements), usage types (general purpose, recording storage, recording backup, hot spare) Configure RAID with local disks; create, delete, and rebuild RAID; RAID info (status, capacity)
Network Disk	Add, edit, delete, search network disk Configure disk usage types: recording storage, recording backup View network disk status: normal, abnormal, offline
Network Disk.	Add, edit, delete, search network disk Configure disk usage types: recording storage, recording backup View network disk status: normal, abnormal, offline
Network Configuration	
Network Configuration	Network configuration supports TCP/IP mode Supports configuration of HTTP, DNS, and alarm ports Network security supports HTTPS and SSH Supports manual route configuration on a specified network interface Supports custom route configuration Supports single-domain dual-NIC configuration
CS Client Configuration	
Client Parameter	Video processing mode: adaptive (default), fluency priority, real-time priority

Configuration	Video stream transmission policy: adaptive Auto-switch to the sub stream when the number of windows exceeds the set value Video stream service selection policy: adaptive, direct connection first Enable GPU decoding Watermark: Embeds custom watermark into live or recorded video Snapshot mode: auto (default), manual Snapshot format: JPG (default), PNG Continuous snapshot interval: 1-10s (default: 1s) Number of continuous snapshots: 2-10 (default: 3) Custom snapshot storage path Custom path and format for saving local recordings Custom path and format for saving downloaded recordings Recording format: MP4 (default), TS Alarm sound setting (custom audio) Audio playing count: 1-10 Pop-up alarm window setting Audio file format: WAV, MP3, max 30MB per file Configure video intercom ringing duration
System Maintenance	
System/Service Restart	Restart system/service manually
System Upgrade (Server Upgrade)	Local upgrade: upgrade through installation packages Image backup: backup and restoration of images, including configuration images such as face and vehicle images
Diagnostic Info	Package and export service operation logs
Operation Logs	Search user's operation logs
Configuration and Data Backup	Automatic database backup: configurable backup interval (daily or weekly)
Device Operations & Maintenance	
Device Diagnostic Info	Supports device diagnostics; diagnostic reports can be exported
Device Status Display	Shows the current online/offline status Shows the last offline time Counts the total offline occurrences within a specified period (max. span: 30 days) Calculates the total offline duration within a specified period (max. span: 30 days)
Capacity Expansion	
Primary/Replica	Primary/replica configuration (replica server) Automatic device allocation Expansion of device connection capacity – Refers to the ability to increase the number of connected devices. Local Area Network (LAN): LAPI, Onvif, and GB/T1400 protocols, supported device types include IPC, NVR, face detection access control terminal, Smart Box, entrance & exit ANPR camera, and video intercom device. Wide Area Network (WAN): LAPI protocol, supported device types include IPC, NVR, and face detection access control terminal. Media capacity expansion: Expansion of the bandwidth for receiving, forwarding, and storing

	media streams. Receiving capacity expansion:-Expansion of the data receiving speed. Data type: Expansion of the speed for receiving alarms, images, events (people flow counting, metadata).
Cascading (Private)	Resource cascading: Obtain and summarize resources from lower platforms Data cascading: Full data reporting from lower platforms Video cascading: the upper platform can view video resources on lower platforms PTZ control: all PTZ (Pan-Tilt-Zoom) functions, including PTZ preemption Voice services: audio broadcast, two-way audio
Cluster Management	
Primary/Replica Management	Configure the local server role: Primary or Replica View primary/replica status
High Availability (HA)	Active/standby mode, automatically monitors service status and completes all-service failover
Protocol & Interconnection	
Star4live	Enable/disable Star4live service After binding UMS to Star4live, confirm UMS is online and syncing data In cloud-edge mode: Users can add, edit, or delete rooms, personnel, visitors, permission groups, schedule templates, and holidays on Star4live, and search the corresponding information on UMS
OpenAPI	Authentication is required when third-party platforms access this platform's OpenAPI
Radar Monitoring	
Human Presence Detection	Add, edit, delete human presence detection tasks and receive alarm data
People Counting	Add, edit, delete people counting tasks and receive real-time people count data and alarm data
Vital Signs Monitoring	Add, edit, delete vital signs monitoring tasks and receive alarms for abnormal vita signs
Fall Detection	Add, edit, delete fall detection tasks and receive fall detection alarm data
Cloud-Edge Collaboration	
Basic Functions	Viewing edge-end channels Supports P2P and TURN between edge service and app Cloud receives alarms from edge service and pushes them to app
Cloud-Edge Services	Access permission management Remote visitor pre-registration, pre-registration after invitation Review visitors remotely
Basic Data Sync	Sync basic data of organizations Sync basic data of personnel and departments Sync basic data of devices and channels
Live View	
Live View Media Stream Protocol	RTSP
Live View Auxiliary Screens	C/S client supports 1 main screen + 3 auxiliary screens; max. 4 live view screens simultaneously
Live View Window Layout	Live view window layout: 1, 4, 6, 8, 9, 10, 13, 16, 17, 25, 36, 64 windows Supports corridor mode Supports custom window layout, and Add and Delete operations Allows user to save live video as group display

	Supports closing all videos at once
View	Add, delete, edit, search views
Sequence Resource	Supports sequence by channel, sequence by view Add, delete, edit, search sequence resources Supports camera sequence and group sequence by organization Supports resource statistics and refresh operations for sequence resources
Camera Sequence	Add, edit, delete camera sequence tasks; refresh organizations and generate resource statistics Start, modify, delete camera sequence devices
Favorites	Add, delete, edit, search favorites Add devices to favorites Supports statistics on resources in favorites
Live View Operations	Play live video by single channel Play live video by view Play live video by sequence View live video, preset, snapshot, continuous snapshots, digital zoom, 3D positioning (pan/tilt the camera, drag the mouse to zoom in/out) Supports AcuSearch and AcuTrack, users can drag the mouse to select a target in the live video image and initiate an instant search with one click
Transport Protocol	Adaptive
NAT (LAPI uses P2P for NAT traversal)	One side has a single-layer NAT Each side has a single-layer NAT No NAT
Start/Stop Live View	Single-channel live video, multi-channel live video Start live video by main stream, sub stream, adaptive mode
Resume Live View	Automatically resumes live view after a restart of the client, device, or service
Stream Transmuxing Policy	GB stream, RTP stream
Image quality	Main stream, sub stream, third stream
Back-end Fisheye Dewarping	Mounting mode: Ceiling mount, wall mount or desktop mount Display mode: 360° Panoramic, 180° panoramic, Fisheye, and PTZ
Panoramic Linkage	Manual tracking, auto tracking
Batch Play	
Camera Resources	Single window + multi-camera sequence
View Resources	Multi-view sequence
PTZ	
PTZ Control	Drag-to-zoom 3D positioning Configure preset positions; max. 255 per camera Sync presets (get presets) Configure home position (auto-guard) Control rotation direction (pan/tilt) Lock/unlock PTZ Set rotation speed Zoom in/out

	Focus near/far Preset patrol Recorded patrol Start/stop patrol Adjust iris Enable/disable wiper
Control permission management	Enables high-priority users to preempt PTZ control from low-priority users Configurable preemption policy for users with the same priority level Automatically releases PTZ control when PTZ is not locked and there's no activity for a certain length of time Configurable auto-PTZ-release time
Patrol Route Configuration	The maximum number of commands in a patrol route is unlimited Patrol command duration, range: 5-300 seconds, default: 10 seconds, supports endless rotation Preset stay time; range: 5-30 seconds, default: 10 seconds
Patrol Plan	Max. 1 patrol plan per camera Max. 8 patrol routes per patrol plan
Auto Guard	Automatically returns to the guard position after being idle for a certain length of time (time is configurable) Max. 8 time periods per auto guard schedule
Playback	
Auxiliary Screens	Supports 1 main screen + 3 auxiliary screens; max. 4 playback screens simultaneously
Playback Transport Protocol	TCP, UDP
Playback Media Service Policy	Adaptive, Direct Connection First
Playback NAT (LAPI uses P2P for NAT traversal)	One side has a single-layer NAT Each side has a single-layer NAT No NAT
Recording Source	Device recording Central storage recording Network storage recording Local recording file
Recording Search	Supports recording search by start time, storage location (front-end recording, central recording, fuzzy search), search domain (registered domain, current domain, cloud search), recording type (alarm recording, manual recording, all recordings)
Playback Control	Start Stop Pause Resume 1x forward Fast forward (16x, 8x, 4x, 2x) Slow play (0.5x, 0.25x, 0.125x) Fast rewind (-1x, -2x, -4x, -8x, -16x) Drag progress bar to navigate through video Zoom in/out on progress bar Click to adjust progress bar

	Play next frame Forward by frame Skip to play event/alarm recordings only Lock recording Tag recording Play recording files, full-frame forward, extracted-frame rewind Start playback, forward 30s, rewind 30s, configurable forward/rewind time Multi-channel synchronous playback Playback via relay
Recording Download	Download format: MP4, TS Multi-channel recording download: Up to 2 concurrent channels View active download tasks and real-time progress Pause, cancel download Retry, resume download Recording download list 32x speed download
Recording Download Task	View, delete recording download tasks
Media Stream Protocol	RTSP
Local Recording	
Recording to Local PC	MP4 and TS formats Start/stop recording Automatically stops recording when the media stream stops
Local File Playback	
Local File Playback	MP4 and TS formats Start/stop recording Automatically stops recording when the media stream stops
Audio	
Stream Audio	Device-side audio formats: AAC/G711a/G711u
Two-Way Audio	Two-way audio/broadcast with/to devices Two-way audio with channel Batch broadcast by organization Device-side audio formats: AAC / G.711a / G.711u
Audio Broadcast	Broadcast to devices Broadcast to channels Client-side audio format: G711u
Video Wall	
Video Wall Resource Management	Add, edit, delete, search video wall resources 1-10/13-16 window layouts Video wall preview
Video Wall Configuration	Open/close windows, roam, overlay, zoom in/out; always display on top/bottom, split window, switch to full screen Configure scenes, scene sequence Screen control: turn on/off screens through UA, UA-A, MODBUS protocols; turn off screens with a

	delay or at a set time
LED/LCD Splicing Display Control	Supports small pixel pitch LED.
Virtual LED Enhancement	Configure LED font, rows, length, scrolling speed, scrolling mode, alignment, and transparency; Up to 4 virtual LEDs per scene Font size supports adaptive and any even value within the range [48–1024] Available fonts: SimHei, KaiTi, SongTi Up to 32 rows per virtual LED Static virtual LED supports up to 300 bytes of text; scrolling virtual LED supports up to 100 bytes of text Scrolling modes: Static, Left-to-Right, Right-to-Left, Top-to-Bottom, Bottom-to-Top Scrolling speed: 1x–10x (1x = slowest, 10x = fastest) Vertical alignment: Top, Center, Bottom Horizontal alignment: Left, Center, Right Background transparency: Adjustable from opaque (0%) to fully transparent (100%)
Live View on Video Wall	Start/stop main/sub streams of video channels on video wall Start/stop main/sub streams output from video wall controllers on video wall Play single channel, scene, group sequence, video signal source on video wall Play group sequence in a single video wall window
Playback on Video Wall	Control playback progress on video wall Stop playback on video wall by closing the Web/CS client Play recordings from lower platform on video wall
Group Sequence Control	Supports operations including start, stop, pause, play previous/next
Scene Operations	Start scene
Media Service Policy	Adaptive Direct Connection First
Stream Transmission Protocol	TCP, UDP
Network Keyboard Control	Start live video on video wall through network keyboard Control playback (forward/rewind) and playback speed adjustment through network keyboard Control PTZ (pan-tilt-zoom) through network keyboard
Video Wall Type	DX video wall: Created using channels of decoder/video wall controller Start live video by dragging cameras to video wall; supports live view, camera sequence on video wall Multi-DC video wall Start live video by dragging cameras to video wall; supports live view, camera sequence on video wall
Smart live view	
Smart Live View	Smart live view mode: Live view operations, local recording, two-way audio, etc.; view pedestrian/motor vehicle/non-motor vehicle records; Face detection mode: Live view operations, local recording, two-way audio, etc.; view snapshot records and comparison records; Vehicle application mode: Live view operations, local recording, two-way audio, etc.; view gate opening/closing events, vehicle passing records, comparison records; Access control mode: Live view operations, local recording, two-way audio, etc.; view door

	opening/closing events, access records; Multi-target detection mode: Live view operations, local recording, two-way audio, etc.; view pedestrian/motor vehicle/non-motor vehicle records, face records; People counting mode: Live view operations, local recording, two-way audio, etc.; people flow counting (counting by area, add/edit/delete/search areas, people flow counting statistics) Crowd density detection (detection by area, add/delete/edit/search areas, detection statistics)
Smart Live View.	Different smart live view modes available, including: smart live view, face detection, vehicle application, access control, multi-target detection, and people counting modes Intelligent mark on live video Custom attributes display
Media Configuration	
Video Parameters	Media stream service selection strategy: Adaptive / Direct Connection First Media stream transmission protocol: TCP Playback/download to server: Adaptive / Direct Connection First Recording playback protocols: TCP / UDP Auto-switch to the sub stream when the number of windows exceeds the set value (configurable range: 1-64) Enable/disable Packet Reordering, Anti Packet Loss, GPU Decoding, Intelligent Mark, Playback Preview Supports restoring default settings
Snapshot Parameters	Continuous snapshot interval: 1-10s (default: 1s) Continuous snapshots: 2-10 (default: 3) Snapshot format: JPG, PNG Restore default settings: Supported
Recording Parameters	Local recording format: mp4, ts Recording download format: mp4, ts Restore default download settings: supported
Player Functions	
Player Functions	Local snapshot: Single and continuous snapshot during live view and playback Volume control: Adjust audio volume during live view and playback Digital zoom: Digital zoom on video during live view and playback Local recording: Manually start/stop local recording Customizable recording file name Configurable recording save path Save recordings in MP4 or TS format Fisheye dewarping: supports mounting mode (ceiling, wall, desktop) and display mode (360° Panoramic, 180° panoramic, Fisheye, and PTZ)
Alarm Center	
Alarm Integration	Supports alarms from GB/ONVIF/LAPI devices Manually trigger emergency event alarms Allows third-party to customize alarms based on our interfaces
Alarm Subscription	Alarm subscription by user Alarm subscription by external domain (higher platform subscribes to alarms from current platform)

	Configurable subscription template name, subscription template description, alarm level, alarm type, and device list
Alarm Aggregation	Multiple alarms of the same source and type within the specified period are reported only once
Pop-up Alarm Window Control	When an alarm is triggered, a global pop-up displaying the alarm details appears in the bottom-right corner of the interface, accompanied by an alarm sound
Alarm Sound	Configure audio name, upload audio file, link with alarm type
Alarm Linkage Actions	Pop-up live video of the linked camera PTZ Play live video on DX video wall Play recorded video of the linked camera Record video Back up recording Output alarm Close live view window Send email Send text Play audio Open/close door Output alarm on the linked camera
Real-Time Alarm	Real-time pop-up alarm window allows for immediate viewing of alarm information When an alarm is triggered, real-time alarm info appears in a pop-up window in the lower right corner Point operations: Camera: Live view, playback, and play video on video wall Face detection access control terminal / access controller: open/close door, keep door open/closed, restore Face detection access control terminal: clear alarms with one-click
Historical Alarm	View historical alarm records, handle alarms Search alarms by alarm time, alarm device, alarm type, alarm level (critical/major/minor/warning/alert), handling result (unhandled/confirmed/false alarm), handling user, and alarm description Export partial or all search results Manually generate alarms
Alarm Statistics	View alarm statistics trends and various types of alarms by time and device Search criteria: collect alarm statistics by time (day/week/month) and device Statistical chart: including trend chart (statistics based on time) and bar chart (displaying the number of alarms by alarm type) Hover over to view the number of alarms View detailed alarm counts Export results
Alarm Handling	Confirm device alarms Push device alarms to client Push device alarms to external domain
Dual-Server Hot Standby	
Dual-Server Hot Standby	Active/standby mode Monitors service status and auto-recovers on the same node when possible Fails over to standby if local recovery fails Standby seamlessly takes over all services (live view, video wall, storage) and resumes active

	services
Face Management	
Face Library Management	Add, delete, edit, search face libraries; sync face libraries to devices; add, delete, edit, search person info
Personnel Info Management	Set important person libraries to manage the monitoring of important persons
Face Monitoring	
Monitoring Task	Face library monitoring based on the private protocol Face monitoring based on the VIID protocol (supported in China)
Real-time Data	
Real-Time Monitoring	Smart live view (display live video of face detection camera), shows captured person info, shows match/not match alarms generated for monitoring tasks
Person Comprehensive Search	
SeekFree (person)	Enter text to search across multiple NVRs for matching persons (leveraging the SeekFree-capable NVRs)
Face Search	Search by attribute, alarm (face match alarm / face not match alarm), and appearance frequency; export search results. Search by image (using NVR for image search) to retrieve face records; with search criteria including capture location, similarity, and capture time. Search by appearance frequency; with search criteria including capture location, appearance frequency, similarity, face library, and capture time. Face trajectory search supports drawing and displaying person movement trajectories on e-map; trajectory playback at specified locations
Pedestrian Search	Search for pedestrians matching specified attributes, with custom search criteria Search by image, with search criteria including snapshot location, similarity, and snapshot time
Comprehensive Search	
Motor Vehicle	Search by vehicle attributes, search by alarm events, search by image, and search by violation records 1. Search by vehicle attributes: supports search criteria including snapshot location, snapshot time, license plate number, vehicle type, license plate color, license plate type, driving direction, speed type, vehicle color, and vehicle attributes. Search results support search by image, export, displaying full snapshots, recordings, and motor vehicle attributes; supports viewing vehicle trajectories. 2. Search by alarm events: supports search criteria including vehicle monitoring type, snapshot location, snapshot time, license plate number, license plate color, and vehicle color. Search results support search by image, export, displaying full snapshots, recordings, and motor vehicle attributes; supports viewing vehicle trajectories. 3. Search by image (requires smart NVR): supports search criteria including snapshot location, snapshot time, similarity, and vehicle image (1 image, 10KB-1MB; the uploaded image must be JPG); supports displaying full snapshots, recordings, and capture details; supports viewing vehicle trajectories. 4. Search by violation records: supports search criteria including snapshot location, snapshot time, violation type, and owner name. Search results support export; supports viewing vehicle trajectories.

Non-Motor Vehicle	Search by attributes, search by image 1. Search by attributes: supports search criteria including snapshot location, snapshot time, vehicle type, driving direction, and speed; search results support search by image, export, and displaying full snapshots, recordings, and non-motor vehicle attributes. 2. Search by image (requires smart NVR): supports search criteria including snapshot location, snapshot time, similarity, and non-motor vehicle image (1 image, 10KB-1MB; the uploaded image must be JPG); supports displaying full snapshots, recordings, non-motor vehicle attributes, and vehicle trajectories.
SeekFree	Enter text to search across multiple NVRs for matching motor vehicles/non-motor vehicles (leveraging the SeekFree-capable NVRs)
Real-Time Monitoring	
Live View	View live video from access control devices, real-time door lock status, real-time access info
Remote Control	Supports remote operations: open/close door, keep door open/closed, restore Supports displaying by custom groups, supports one-click to keep door open/closed, restore
Personnel Management	
Department Management	Add, edit, delete, and search departments
Personnel Management	Supports personnel information enrollment, including personnel ID, name, ID number, validity period, etc., with search capabilities. Information entry includes: personnel ID (required), name (required), ID number, ID type, access validity period, date of birth, gender, mobile phone number, department, address, remarks, door opening password, room information, face photo, vehicle information, access card (supports card issuance and card return), fingerprint, permission group, face library Supports custom attributes for personnel records. Supports import and export of personnel information and images. Multiple data capture methods, including: face&ID card verification devices, USB cameras, face detection access control terminals
Access Permission Configuration	
Permission Group Management	Add, delete, edit, search permission groups Sync permissions, including auto sync (default mode) and manual sync Assign permissions by person, door, department, building
Authentication Mode	Face, card, password, fingerprint
Schedule Template	Add, delete, edit, search schedule templates Link holiday schedules, weekly schedules; each schedule template can link with up to 16 holiday schedules
Permission Search	
Access Permission Search	Search personnel permission by name, sync status, access control point range, building, person/department
Advanced Configuration	
Advanced Configuration	Set door channel name, door open timeout, duress code, alarm trigger threshold for excessive authentication attempts, whether to receive abnormal door opening alarms
Access Control Events	
Access Records	Obtain access records from devices View, export access records

Access Control Personnel Management	
Image Pre-processing	Image correction
Face Feature Management	Extract feature data through access control devices, sync feature data
Multi-Factor Authentication	
Person Group	Add/delete/batch delete Bind by department/person View personnel group list
Authentication Group	Add/delete/batch delete Copy authentication group View personnel group list
Authentication Group Configuration	Bind door channels Set schedule template/validity period/authentication interval/concurrent authentications Enable/disable authentication group
Anti-passback	
Anti-passback Rule Configuration	Add/delete/batch delete Set area anti-passback/route anti-passback Set schedule template Enable/disable anti-passback
Bind Access Control Devices	Configure single-controller anti-passback and cross-controller anti-passback
Multi-Door Interlocking	
Rule Configuration	Configure rules based on access control devices View configuration list
Basic Configuration	
Floor Configuration	Add, edit, delete floors Set control mode (free mode/forbidden mode/controlled mode), default is free mode
Device Binding	Bind/unbind cameras, access control devices, etc. Search the bound device list, show device name, IP address, device ID, serial number, device type, location of the linked elevator controller, status, operations (e.g., relink elevator controller)
Parameter Configuration	Set records, including reporting type (upload all/successful records), storage mode (stop/overwrite when storage is full), card type Set manual call response time (outside/inside elevator) Set automatic call trigger time Supports multiple elevator call methods (door station verification/door station call/indoor station call/manual call + in-elevator verification)
Permission Configuration	
Verification Configuration	Add, delete, copy verification templates Add, delete verification configurations
Permission Configuration	Bind personnel/visitors with elevator controllers Configure schedule templates View permission list, show name, personnel ID, elevator control permissions, sync status, operations (sync permission)
Elevator Control	
Elevator Control Live View	View live video from the linked cameras/door stations to monitor the elevator's real-time status

Elevator Control Verification Records	Search elevator access records to monitor the elevator usage history
Alarm Function	Integration with fire alarm systems to trigger linkage actions
Video Intercom Configuration	
Device Types	Compatible indoor stations, door stations
Device Operations	Bind devices with rooms, bind rooms with indoor stations, remotely control door stations to open doors
Call Recipient Management	Add, delete, edit, search call recipients
Contacts	Contacts management, use contacts to call indoor stations
Video Intercom Call	
Call Answering	Door station calls management center, indoor station calls management center, management center calls indoor station
Call Records	View call and answer records
Video Intercom Alarm	
Video Intercom Alarm Receiving	Receives alarms from indoor stations and door stations
Visitor Management	
Visitor Registration	Enroll visitor face images and license plates (integrated with access control and checkpoint systems for entrance & exit management), custom visitor attribute fields, configure visitor permissions Search registration records by: registration time, visitor type, visitor name, mobile phone number, feature extraction status, host name, and ID number Extract face feature via access control devices for sync, with option to re-extract Enroll visitors via face&ID verification terminals, with quick navigation to terminal enrollment mode settings
Visitor Preregistration	Visitor preregistration through the mobile client (requires the app to enable Cloud-Edge mode)
Visitor Review	Visitor review through the mobile client (requires the app to enable Cloud-Edge mode)
Visitor Sign-Out	Sign out visitors manually Configure an automatic sign-out time; the system automatically signs out all visitors who have not manually signed out at the specified time
Visitor Records	
Visit Records	Search visitor access records by: registration time, visitor type, visitor name, mobile phone number, host name, and ID number Export, delete visitor records
Area Monitoring	
Area Monitoring	Set area monitoring tasks that trigger alarms when a visitor is detected in a restricted area or outside permitted time periods Set a face similarity threshold; alarms are triggered when the similarity exceeds the set threshold
Permission Search	Search by device status and device scope Sync, refresh permissions
Attendance Configuration	
Attendance Rules	Set automatic attendance calculation time (default: 5 a.m.)
Staff Schedule	Set time periods, manage shifts and schedules (assign shifts to staff members/departments)

Holiday	Holiday configuration
Attendance Handling	
Leave	Handle leaves/business travels
Re-Sign In&Out	Re-sign in or out, view re-sign in&out records
Attendance Statistics	
Original Data	Search and export original attendance data
Attendance Details	Search, export detailed attendance data; calculate attendance
Attendance Summary	Summarize and export attendance data
Attendance Data	
Data Export	Export attendance data to an Excel file
Data Sync	Sync data to a third-party database (MySQL, PostgreSQL, SQLServer)
Counting Resources	
Counting Area Management	Includes people flow counting area and crowd density monitoring area Add, delete, edit, search counting areas Supports quick navigation to smart live view for real-time people flow statistics
Counting Operations	
Real-Time Statistics	Realtime statistics: View live video from people counting cameras with people counting statistics People flow counting: Displays the number of people that have entered, the number of people that have exited, the number of people allowed to enter, the number of people present, and passage status Crowd density monitoring: Displays the number of people allowed to enter, the number of people present, and area status
Statistical Report	(Only available to people flow counting) Displays counting statistics by month/day/hour/minute; displays statistics as a chart or table
Patrol Management	
Patrol Point Type	Patrol reader Face detection access control terminal, access controller
Patrol Route	Add, delete, edit, search patrol routes
Patrol Method	6 patrol methods available: All Random, First Point Fixed, First and Last Points Fixed, All Points Ordered (Random Interval), All Points Ordered (Fixed Interval), All Points Ordered (Custom Interval)
Patrol Schedule	Add, delete, edit, search patrol routes; configure schedule details, holidays, and patrollers
Patrol Records	Search patrol records by time, patrol points, etc.
CPU	
CPU	Intel Core i3-8100 @3.6GHz
Operating System	
Operating System	Ubuntu-24.04.2
Memory	
Memory	32GB
System Disk	
System Disk	SSD 128GB
Storage Disk	
Storage Disk	SATA x 16

	eSATA x 1, miniSAS x 2
Video Output	
Video Output	HDMI x 2, VGA x 1
Network Interface	
Network Interface	GbE x 4
USB	
USB	USB2.0 x 2, USB3.0 x 2
Alarm Input/Output	
Alarm Input/Output	24 x alarm input, 8 x alarm output
Audio Interface	
Audio Interface	RCA 1 x input, 1 x output
Serial Interface	
Serial Interface	RS232: RJ45 x 1
	RS485: RJ45 x 1
Dimensions (L x W x H)	
Dimensions (L x W x H)	21 x 19 x 5.2 in (533mm x 481.6mm x 131.5 mm)
Net Weight	
Net Weight	28.6 lbs (<13KG)
Operating Temperature	
Operating Temperature	14F to 131F (-10°C to +55°C)
Operating Humidity	
Operating Humidity	10% to 90% (non-condensing)
Power Consumption	
Power Consumption	≤ 150W (without HDD)
Power Supply	
Power Supply	Standard 1 power module / optional dual power modules

Dimensions

