



**iVMS-5200 ANPR Version 1.0.2
Specification**

Specification

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About this Manual

This Manual is applicable to iVMS-5200 ANPR Function Module.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (<http://overseas.hikvision.com/en/>).

Please use this user manual under the guidance of professionals.

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Introduction

iVMS-5200 ANPR function module provides an intelligent and highly intuitive solution for parking lot management, offering the license plate recognition, the pass rule settings and linkage actions for vehicles. You can generate reports for traffic flow of parking lots and ANPR units, and search the vehicle information, and so on.

Key Components

- **Server:**

- Central Management Server (CMS)
- Recording Server (Optional)
- Stream Media Server (SMS, optional)
- Parking Terminal Server (Optional)

- **Client:**

- Web Client
- ANPR Control Client

Running Environments

- **Operating System:**

- For Central Management Server:**

- Windows Server 2008 R2 (64-bit) / Windows Server 2012 (64-bit) / Windows 7 (64-bit) / Windows 8 (64-bit) / Windows 8.1 (64-bit) / Windows 10 (64-bit)

- For Recording Server:**

- Windows Server 2008 (64-bit) / Windows Server 2012 (64-bit) / Windows 7 (64-bit) / Windows 8 (64-bit) / Windows 8.1 (64-bit) / Windows 10 (64-bit)

- For Stream Media Server:**

- Windows Server 2008 R2 (32/64-bit) / Windows Server 2012 SP2 (32/64-bit) / Windows 7 (32/64-bit) / Windows 8 (32/64-bit) / Windows 8.1 (32/64-bit) / Windows 10 (32/64-bit)

- For Parking Terminal Server**

- Windows Server 2008 (32/64-bit) / Windows Server 2012 (32/64-bit) / Windows 7 (32/64-bit) / Windows 8 (32/64-bit) / Windows 8.1 (32/64-bit) / Windows 10 (32/64-bit)

- For ANPR Control Client**

- Windows 7 (32/64-bit) / Windows 8 (32/64-bit) / Windows 8.1 (32/64-bit) / Windows Server 2008 R2 (32/64-bit) / Windows Server 2012 (32/64-bit) / Windows 10 (64-bit)

- **Browser Version:**

- IE 8/9/10/11 (32-bit);
- Chrome 35/36/37/38/39/40/41/42/43/44 (32-bit)

- Firefox 30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50 (32-bit)

Note: For Chrome 43/44, you must manually enable NPAPI for the web browser.

● Virtual Machine

- VMware® ESXi™ 6.x
- Microsoft® Hyper-V with Windows Server 2012 R2

Note: Only Central Management Server can be installed on the Virtual Machine.

● Hot Spare

- Microsoft® Windows Server 2008 R2 Enterprise 64-bit (Failover Clustering)
- Microsoft® Windows Server 2012 64-bit
- RoseReplicatorPlus_5.1.0_175-x64

Note: For introduction about RoseReplicatorPlus_5.1.0_175-x64, refer to Rose Datasystems Inc. company's website.

Function Features

● Server

- **Central Management Server**
 - Trigger alarm linkage actions of other function modules
 - Provide normal and hot spare installation mode
 - Provide unified authentication service for clients and servers
 - Provide the centralized management for the surveillance devices, alarm device and servers
 - Provide the log management and statistics function
 - Provide the interface for the third-party system integration
 - Scalable for medium and large-size projects
 - Service manager for system health monitoring
- **Recording Server (Optional)**
 - Obtain the audio and video data stream via the Stream Media Server or directly from the connected encoding device
 - Extract the index information and dump the audio and video data to the storage device to realize the centralized management of the mass video & audio files
 - Provide the efficient, secure, convenient storage service for pictures with storage efficiency of 10 pictures per second
 - Optimized picture storage performance
- **Stream Media Server (Optional)**
 - Forward and distribute the audio and video data
 - Support live view function via mobile client
- **Parking Terminal Server (Optional)**
 - Manage the parking lot event and alarm

● Web Client

- Startup wizard guides you through basic operations:
 - Adding encoding devices
 - Setting the recording schedule
 - Adding the parking lot for management
 - Configuring the event parameters
- Multiple devices can be added: network cameras, video encoders, NVRs
- The password strength of the added device can be checked by the system for security notification
- Four adding modes for encoding devices available:
 - By specifying the device IP address
 - By specifying an IP segment
 - By specifying a port segment
 - By importing devices in batch and devices information can be exported
- Enable the added cameras to make them active
- NVR (Network Video Recorder) manageable:
 - Add NVR by IP address
 - Remotely configure the NVR via web browser
 - Store pictures on the NVR by one-touch configuration
- PTS (Parking Terminal Server) Management
 - Add PTS by IP address
 - Configure the storage device for PTS to store the detected vehicles pictures
- Video and Picture Storage
 - Store pictures on Recording Server or NVR
 - Store videos on local device, Recording Server or NVR
 - Two storage methods:
 - Central storage: Recording Server, NVR
 - Distributed storage: DVR / NVR
 - Recording schedule: All-day Template, Weekday Template, Weekend Template and Custom Template
- Vehicle Management
 - Support adding vehicle(s) and vehicle list(s)
 - Support linking vehicle(s) to multiple vehicle lists
- Event and Alarm
 - Parking lot event and alarm
 - Vehicle List Alarm
 - Forbidden Period Alarm (support selecting vehicle list(s) and vehicle(s) in the list(s) can trigger the alarm)
 - Parking Overstaying Alarm (support selecting vehicle list(s) and vehicle(s) in the list(s) can trigger the alarm)
 - Parking After Closing Time Alarm (support selecting vehicle list(s) and vehicle(s) in the list(s) can trigger the alarm)
 - Vehicle List Expired Alarm

- Insufficient Free Spaces Alarm
- ANPR camera event and alarm
 - Device Blacklist Alarm (device blacklist and whitelist enabled)
 - Device Whitelist Alarm (device blacklist and whitelist enabled)
 - System Vehicle List Alarm (system vehicle list enabled)
 - Video Loss Alarm
- General event and alarm
 - Device offline alarm
 - Server exception alarm
 - Alarm input alarm
- Support to save event as alarm and set linkage actions for event and alarm respectively
- Send emails to notify users of the event information with email template configurable
- Set the arming template for the events: All-day Template, Weekday Template, Weekend Template and Custom Template
- Set the alarm level: high, medium, low
- Set multiple alarm linkage actions: Pop up Image of Camera, Trigger Audible Warning (voice text), Link Alarm Output
- Group Management
 - Support group management of the enabled cameras
 - One camera can be added to multiple groups
- Parking Lot Management
 - Entrance& Exit Management
 - Manage up to 20 parking lots, each parking lot can support up to 10 entrances and exits
 - Each entrance and exit can be configured with display screen, capture camera, and barrier
 - Vehicle List Management
 - Configure the vehicle list for each parking lot (support setting vehicle list's effective time for the parking lot and setting the vehicle information in the list)
- Search
 - Search entering and exiting vehicles of parking lot
 - Search vehicles by entrance / exit
 - Search vehicles by parking duration
 - Search no exit record vehicles
 - View the vehicle related video (from 5s before the vehicle passed to 5s after that)
 - Filter the vehicle passing records via the vehicle list (Vehicle List is available when the parking type is Vehicle List)
 - Export all the search results to local PC
 - Search vehicles detected by ANPR camera

- Search vehicles by ANPR camera
- Export all the search results to local PC
- Report
 - Generate Parking Lot's Traffic Flow Report
 - Generate Vehicle in Parking Lot Report
 - Generate Entrance/Exit's Traffic Flow Report
 - Generate Average Parking Duration Report
 - Generate ANPR cameras' Traffic Flow Report by Group
 - Send reports regularly, and support attaching the vehicle picture to the report notification email
 - Print reports, and support adding remarks for the printed report
- System Configuration and Maintenance
 - Define the retention period (default: one month, maximum: one year) for the alarm logs, operation logs and license plate data
 - Display the configured LAN and WAN IP address
 - Configure email sender's settings
 - Define matching rules for advance search of the license plate number
 - Configure the FTP server to upload the reports to
 - Configure to show or hide the country to which the vehicle is registered
 - Configure the retention period for storing the no exit record vehicles information

● ANPR Control Client

- Access to Central Management Server via IP address or domain name
- Open a function module in a new display window and multiple function modules can display on different auxiliary screens at the same time
- Log in with the normal and domain user
- The user account will be frozen after 5 failed password attempts
- License Plate Recognition
 - Receive the real-time vehicle passing information
 - View the vehicles passed by video and picture
 - Check vehicle details and edit license plate as desired
 - Provide 1/4/9/16-window division mode for live view
 - Switch the live view stream to main stream, sub-stream or third stream
 - Highlight the license plate number with the configured vehicle list color when the vehicle triggers vehicle list alarm
- Vehicle Tracking
 - Show passing vehicle information of the entrance or exit
 - Select to display the entrance view, exit view, or both entrance and exit view for vehicle tracking
 - Highlight the license plate number when the vehicle triggers the vehicle list alarm
 - Barrier control
 - Advanced search of entry picture of the exiting vehicle

- Display 20 latest entering/exiting records
- Check vehicle details and edit license plate as desired
- Highlight the license plate number with the configured vehicle list color when the vehicle triggers vehicle list alarm
- Vehicle Search
 - Search vehicle information by entrance/ exit of parking lot
 - Search vehicle information by parking duration
 - Search vehicle information by ANPR camera
 - Check vehicle details and edit license plate as desired
 - Export vehicle information
- Alarm Center
 - Display alarm information including alarm time, alarm name, alarm type, etc.
 - Acknowledge the alarm information
 - Enable / disable the alarm audio
 - Enable / disable alarm triggered pop-up image
 - Search event logs and alarm logs
 - Export alarm information
- Health
 - Check system running status
 - Check device/ camera status
 - Check recording status
 - Check storage device status
- System
 - Log search
 - Search operation logs
 - Search system logs
 - Export logs
 - General Configuration
 - Auto-login settings
 - Shortcut for barrier control
 - Saving path for videos and pictures
 - Alarm sound settings
 - View switch for vehicle tracking module

Performance Specification

Central Management Server	Performance Specification
Number of Connected Cameras per Central Management Server	Maximum 1000
Number of Connected Encoding Devices per Central Management Server	Maximum 1000
Number of Clients per System	Maximum 100
Number of Users per Central Management Server	Unlimited
Number of Recording Servers Connected per Central Management Server	Maximum 32
Number of Stream Media Server Connected per Central Management Server	Unlimited
Number of Parking Lots	Maximum 20
Number of Entrance / Exits	Maximum 100 pairs, including 100 entrances and 100 exists
Vehicle Passing Speed	Maximum 2 Vehicles per second (generally, one vehicle passing needs 15 seconds)
Number of Vehicle Lists	Maximum 100
Number of Vehicles Added in Vehicle List	Maximum 5000
Number of Vehicles Passing Records	Maximum 5 million per month
Number of Alarms	Maximum 5 million per month
Number of Groups	Maximum 100
Number of Cameras per Group	Maximum 50
Number of Reports for Sending Regularly	Maximum 50
Number of Email Recipients	Maximum 40
Alarm Information with Pictures and Alarm Information without Pictures can be received concurrently by a Central Management Server	Maximum 10 pieces of Alarm Information with Pictures and 100 pieces of Alarm Information without Pictures can be received concurrently by one Central Management Server
Recording Server	Performance Specification
Number of Cameras per Recording Server	Maximum 64
Video Storage Efficiency	Maximum 128 Mbps
Picture Storage Efficiency	Maximum 10 Pictures per second
Storage Space of Single Recording Server	Maximum 80 TB (recommended minimum capacity: 100GB)
Stream Media Server	Performance Specification
Video Input Bandwidth per Stream Media Server	Maximum 300×2 Mbps

Video Output Bandwidth per Stream Media Server	Maximum 300x2 Mbps
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