

Milesight

# MILESIGHT VMS ENTERPRISE

▪ Better Inside, More in Sight ▪

V1.2



Milesight | [www.milesight.com](http://www.milesight.com)

Tel: +86-592-5922772(8801) - Sales +86-592+5922772(8701) - Support

Mail: [sales@milesight.com](mailto:sales@milesight.com) [support@milesight.com](mailto:support@milesight.com)

MILESIGHT USA

Tel: +1-800-561-0485

Add: 220 NE 51st Street Oakland Park, Florida 33334, USA

MILESIGHT KOREA

Tel: +82-31-990-7732

Add: 925, Anyang SK V1 Center,

LS-ro 116beon-gil, Dongan-gu, Anyang-si, Korea

MILESIGHT CHINA

Tel: +86-592-5922772

Add: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China



Milesight VMS Enterprise is a professional and intelligent video management software for medium to large business projects. Together with Milesight cameras and third-party cameras, it can simplify your video surveillance and fulfill your demands and expectations with rich core functions including Live View, Playback, Recording Export, E-Map, Event Alarm, Smart Search, AI Analytics, and more.



## ABOUT US

### About Milesight

Founded in 2011, Milesight is a fast-growing AIoT solution provider committed to offering the value-added services and cutting-edge technologies. Based on video surveillance, Milesight expands its value proposition into IoT industry, featuring Internet of Things communication, and artificial intelligence technologies as its core.



### Milesight VMS Enterprise System Overview

- Centralized resource management
- Manage masses of network cameras in different locations
- Multi-user login at the same time
- N+M Failover



### System Requirement





# POWERFUL MILESIGHT VMS ENTERPRISE

Simplify Video Management  
Enhance Your Security



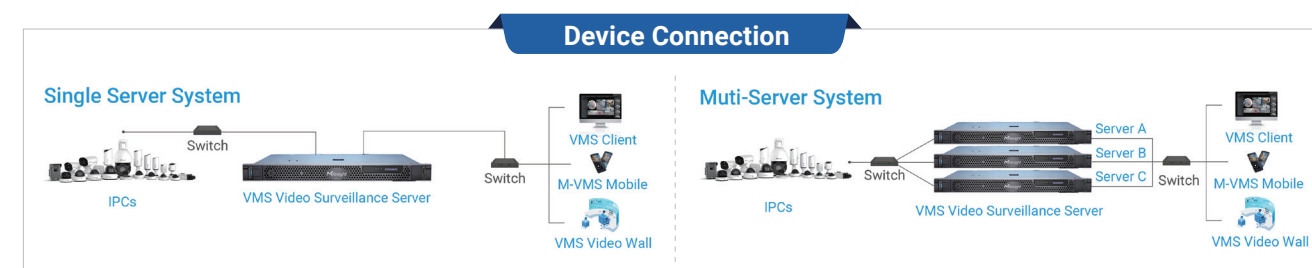
## 4 Stand-out Uniques



## Power up Your VMS Performance



- **Multi-channels Recording & Storage**  
Support up to 128 video streams per server while providing cost-effective storage up to 12\*20TB
- **Stable & Robust Performance**  
RAID-configured redundancy & N+M Failover realize a more robust video management system
- **Quick & Simple Setup**  
The latest VMS system pre-configured guarantees a hassle-free installation experience
- **Hardware Form of Milesight VMS Enterprise**  
Enrich the form of Milesight VMS Enterprise to bring the customers the greatest convenience



## When AI+ IoT Meet VMS

By leveraging IoT technology, which enables the system to interact between individuals and the environment, this ground-breaking innovation can improve the management through combination with advanced AI functions to identify and track objects in real-time.



## Milesight VMS Enterprise AIoT Solution



Nursing Home

Retail

Petrol Station

Smart Building





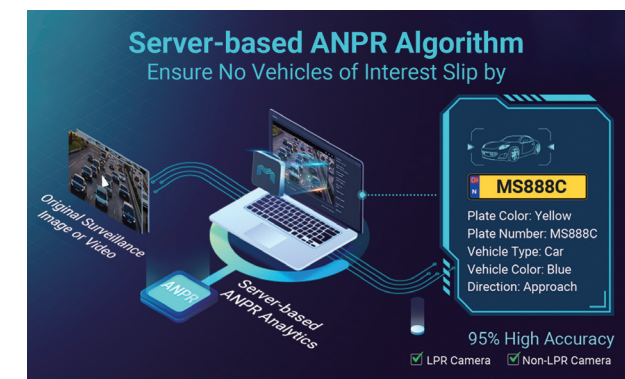
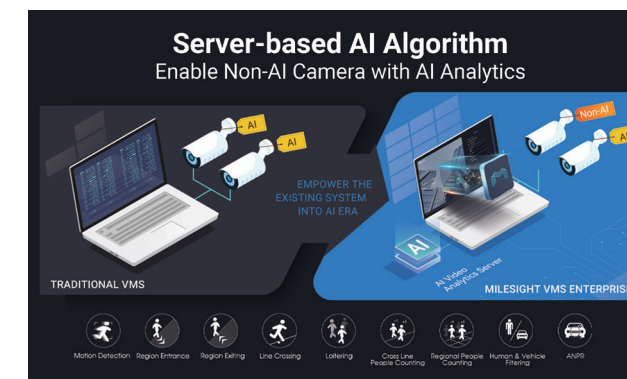
## SMART ANALYTICS & AUTOMATED SECURITY

Transform and augment data into actionable information

Security automation is the use of AI technology that better understands monitoring data and takes relative actions with reduced human assistance in order to accelerate security processes, improve security efficiency and enhance security infrastructure.

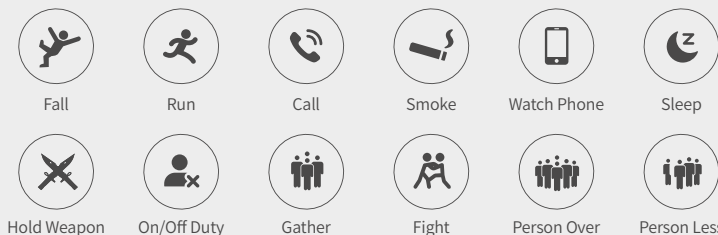
## Milesight VMS Enterprise Intelligent AI Analytics

### 2 Server-based Powerful Functions



### Abundant AI Features

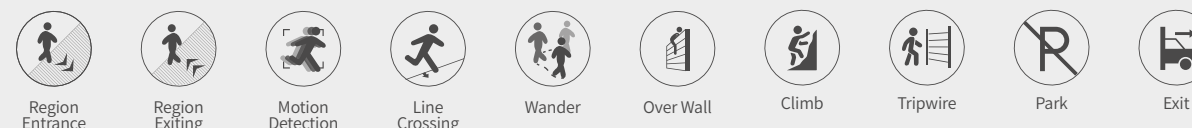
#### Behavior Alert



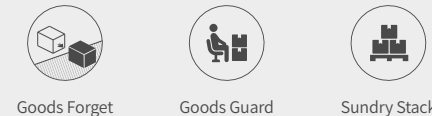
#### Face-Human & Recognition



#### Perimeter Alert



#### Goods



#### Head Count



### Milesight VMS Enterprise New Arrival — AI BOX

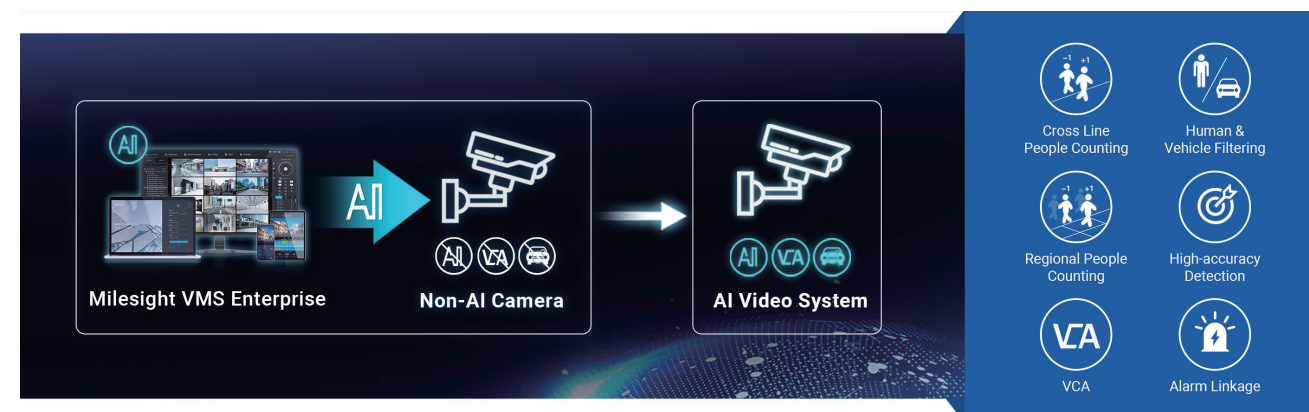
The combination of AI Box and VMS enables more algorithms to be used and enriches the application scenarios. Milesight AI Box is a cost-effective AI computing product, which boasts with powerful computing for video processing and machine learning.



## On-server AI Analytics

### Milesight On-server AI Analytics

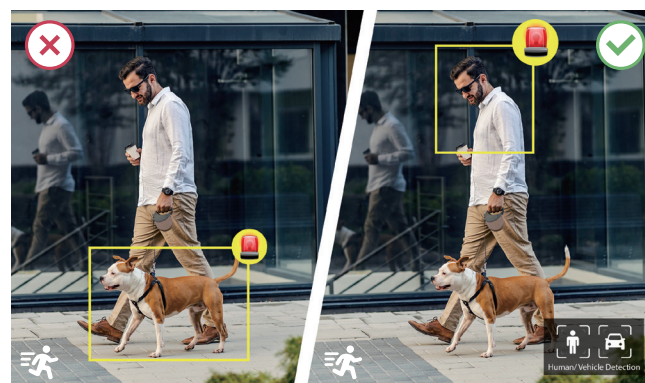
Milesight VMS Enterprise already has AI capabilities enabled, which means even a simple video fragment could be used to generate smart video analytics without any additional sensors or devices. The intelligent attributes of humans and vehicles can still be filtered and alarmed by the AI VMS system, regardless of whether the front-end IPC is AI or non-AI. Meanwhile it is easier to integrate AI intelligence into your current business project by using only software rather than reinstalling the front-end camera system.



### Smarter Vehicle-Human VCA

Human and vehicle are the primary focus of a security system. The on-server AI system can accurately detect a wide range of VCA events, including Motion Detection, Vehicle or Human Detection, Region Entrance, Region Exiting, Line Crossing and Loitering, which helps to reduce false alarms and increase the system's adaptability to various applications.

Furthermore, with the AI analytics enabled, the tracking box and detected area will be displayed in the live view interface, which is more intuitive for event monitoring.



### People Counting & Occupancy Solution

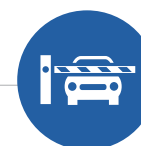
With the on-server intelligence, it is easy and quick to calculate the number of people in the specific area or over the line, such as the Queuing Area and the Visitor Occupancy. It's also simple to integrate all kinds of third-party cameras to create an all-in-control solution that includes an analytics data report.



## Server-based ANPR Solution

### Access Control

Milesight VMS Enterprise could assist public parking operators and private car-park management in improving the efficiency of enforcing security measures and improving customer service through prompt responses.



### Black/White List Detection

When a match is found with the predefined Black/White List, perform the action as settings. For example, if the recognized number is on the black list, notify the operator and start recording; if the recognized number is on the white list, open the barrier.



### ANPR Preview

When a plate is recognized, the notification will be pushed and listed in the right panel of the Liveview Interface-ANPR Preview. This panel allows users to filter the video fragments by adding keywords, such as the license plate number, to easily find those that match their search criteria.



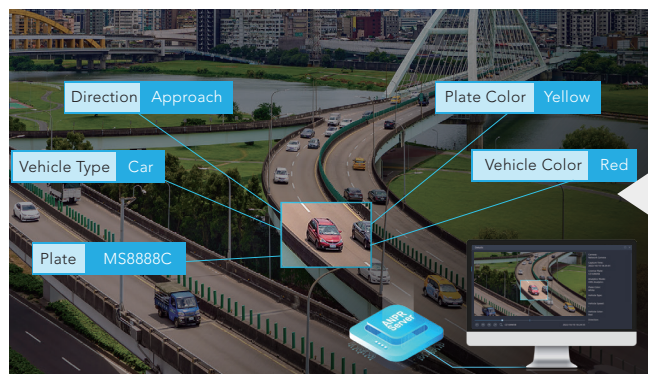
### Audio Notification

When a pre-set event is triggered, it is possible to play the recorded audio to notify the drivers who violate the parking rules, are on a black list, or are loitering in the neighborhood.



## Traffic Flow Monitoring

Making ITS in a digitized way will greatly improve the process of smart traffic and smart city. Milesight VMS Enterprise could deliver real-time traffic and incident data when a vehicle drives over-speed or drives in the wrong direction, which is essential for further investigation.



### Server-based ANPR

Enabled with ANPR algorithm to achieve server-based ANPR solutions regardless of whether the camera is an LPR one or not, making the recognition attributes of license plate and vehicle much easier and more efficient.



### Integrated Radar+AI+LPR

Radar+AI+LPR are integrated into the VMS Enterprise with Milesight AI Radar LPR camera, converting traffic data into actionable insights such as vehicle speed, direction, count, and attribute.



### 3D Radar Localization

The real-time and comprehensive monitor is supplemented by a dynamic visualization of traffic detection in the Live View interface, including data on vehicle counts, traffic congestion, traffic incidents and infractions.



### ANPR Result Search

For the tracking of violation, users could fast locate the traffic violator and get detail information via ANPR Result Search function in seconds, including vehicle attribute, license plate number, plate color, plate type, capture time, live screenshot and so on.



## SMART FORENSIC EVIDENCE

Narrow down investigations and quick find relevant information

With so many cameras to monitor, operators are often overloaded with the massive video and data, Milesight VMS Enterprise supports local and NAS storage, and the smart forensic evidence ensures that the operator is always on the right track when searching for the corresponding clips, greatly facilitating investigations and speeding up case resolution.





### Smart Video Synopsis

Smart Video Synopsis achieves the gathering of objects (humans, vehicles, and other moving objects) that appear at different time points into one picture or a short time segment. Filtering objects by their moving paths and ROI allows you to quickly locate the original playback video and find more evidence.



### Event & Alarm Center

In large projects, hundreds of alarms can occur in a single day, making it difficult to identify the most critical cases. To improve the efficiency of the monitoring system, customizing the priority of alarms is recommended. Furthermore, it can enhance the speed of discovering and recording events through event category and event search.



### Smart Search

In the area of interest, users can keep an eye out for relative movement. The timeline will highlight the search result in red when dragging the detect area on the screen to process large numbers of issues more effectively. For instance, the smart search will promptly identify anyone who enters the designated area and effectively address any difficulties with items left behind and theft.



### Evidence Lock & Bookmark

User could directly drag and lock/bookmark the signification videos on the timeline, allowing easy export and search of multiple video recordings.



### Event Filter

Users could filter the event by entering keywords on the notification panel. Filtering events by type makes it easier to quickly view all of the relevant events, get the recording, and show the thumbnails as necessary.



### Visual Timeline

The event will be automatically tagged in various colors once it is triggered. The recording preview procedure becomes more natural and user-friendly by using colors to distinguish different event categories and thumbnail displays. Additionally, the color of different events is customizable for an intuitive and straightforward experience.



### Split Playback

Divide the chosen time interval into several video segments of the specified period as needed, so that users can watch videos from different time periods at the same time.



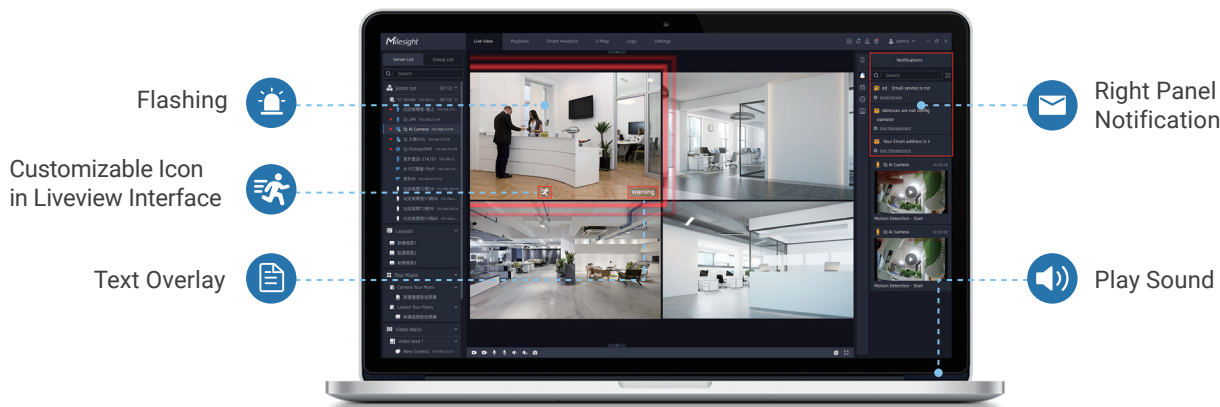


# REAL-TIME INCIDENT RESPONSE

Extend video operations to the field and make informed decisions

The seamless and comprehensive monitoring for hundreds or even thousands of cameras in an easy-to-use platform allows users to break the location limit, respond quickly, and handle the situation with the real-time alert and intuitive E-map.


## Multiple Ways of Notification



 **E-map**


Manage all your cameras and take command of all locations, by displaying all security devices and alarms in a dynamic map.

- If there is an alarm triggered, the notification will show on the E-map to draw the attention of the users.
- Support locating the specific position quickly by the Map Preset.

 **Video Wall**

Achieve the centralized management of multiple video wall servers:

- A simple and powerful way to configure and manage monitors remotely.
- Support multi-screen and split-screen for centralized monitoring.

 **Tour & Tour Plan**

User could select different cameras/layouts in a tour plan, and it will automatically switch in the Live View interface, which is convenient to monitor different sites and get the most interested information.

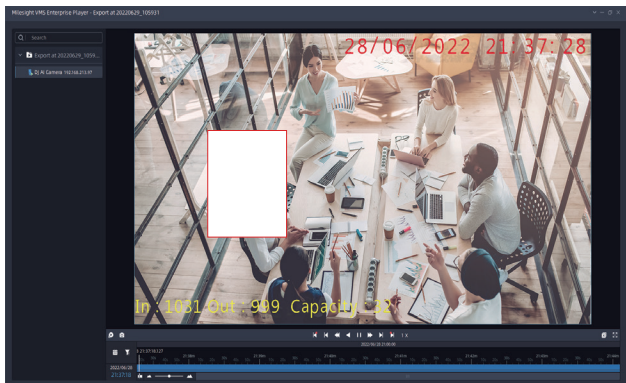
# FLEXIBLE EVIDENCE MANAGEMENT

Enable operators to export recordings according to different needs

When there are many recordings in the system, archive management can streamline the process of reviewing and providing relative evidence. The effectiveness of video clip security and investigation follow-up is considerably increased by flexible and multiple export ways.

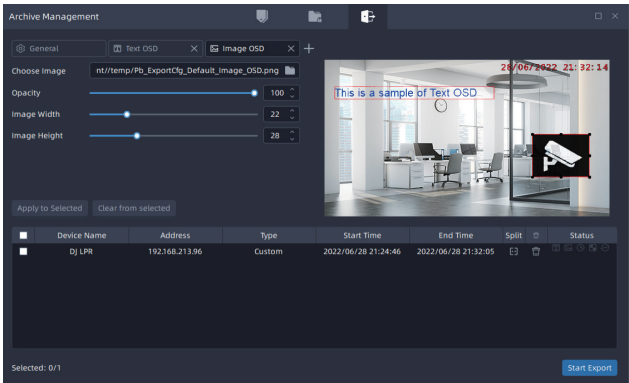
## Unique EXE File

The EXE File is a lightweight media player that makes it easier to evaluate exported recordings and increases file security by requiring a password before opening any files.



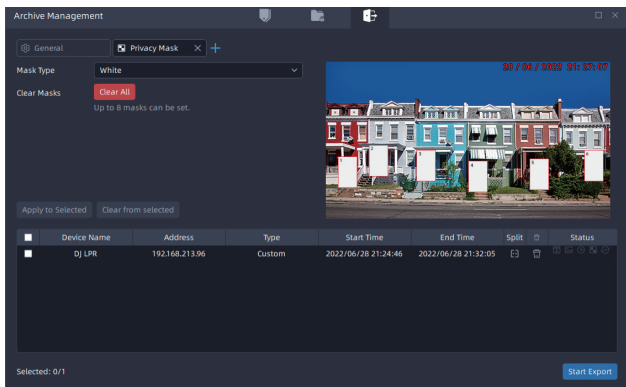
## Multiple OSD Formats

Multiple OSD formats, such as text OSD, image OSD, and timestamp, are supported for exporting the recording, and each OSD's color and location can be customized.



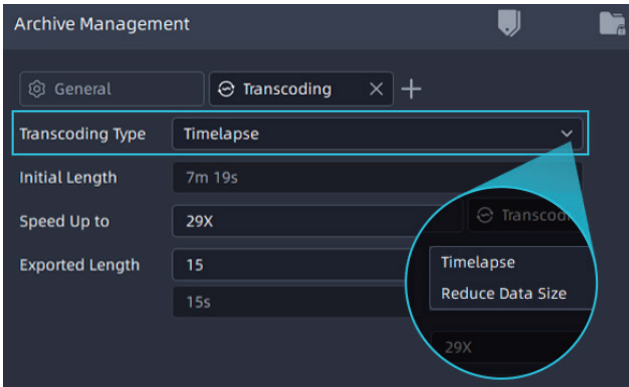
## Privacy Masking

Up to 8 masks can be configured to cover specific areas, giving the surveillance area a great level of privacy.

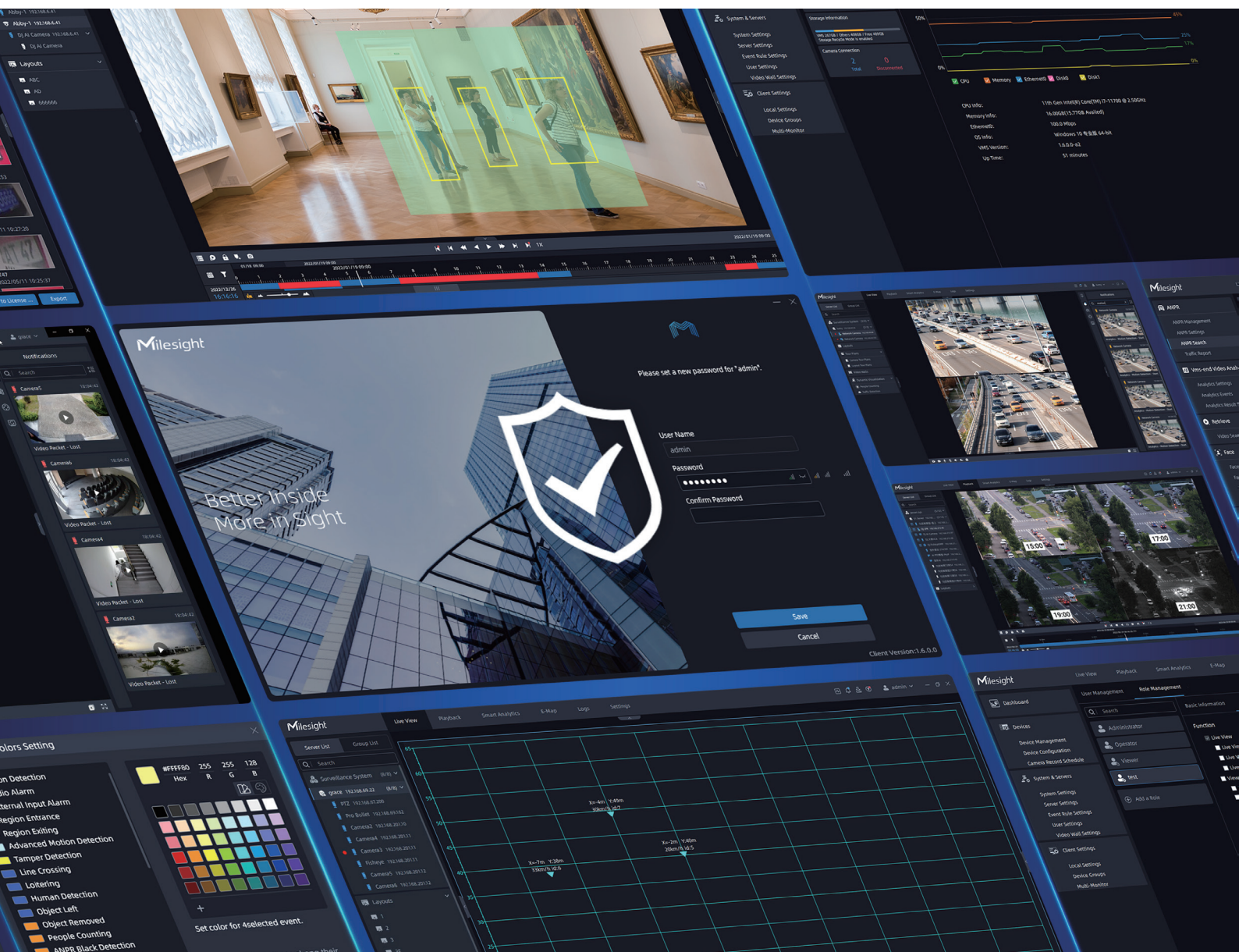


## File Transcoding

Timelapse and reduce data size are available to meet the different surveillance needs.







## RELIABLE AND SCALABLE SYSTEM

Ensure a robust security system for all-time monitoring

Despite its vast functionality, Milesight VMS Enterprise is also simple to install and provides a smooth and secure user experience while reducing hardware load.

## HIGH COMPATIBILITY

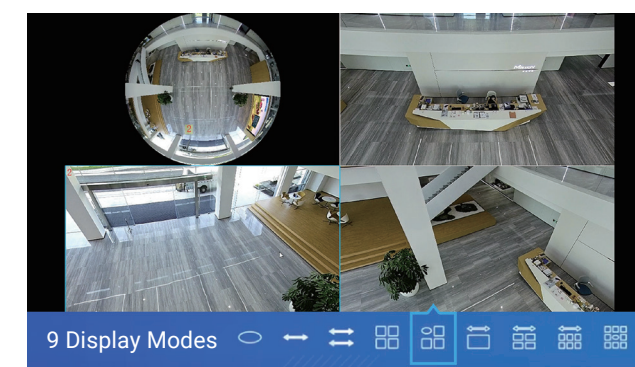
Open platform for fully integrated surveillance solution

Integrating all types of cameras into a single system is critical for developing a unified camera management system. Milesight VMS Enterprise is compatible with Milesight and third-party cameras to monitor all entities and sites from a single interface.

### Compatible with Milesight and 3rd Party Cameras

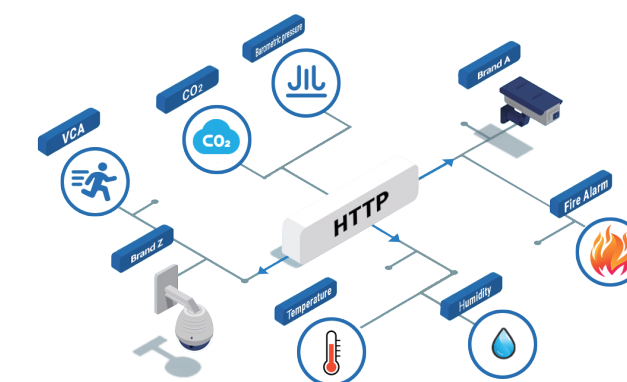


### Multiple Fisheye Dewarping Modes



### Support Trigger Alarms from 3rd Party Cameras via HTTP

HTTP is supported to integrate with any 3rd party system. After creating event rules on the system, once Milesight VMS Enterprise receives an event via HTTP, it will trigger actions such as recording, controlling camera output, calling PTZ preset, showing notification, playing audio, sending email, pushing alarm to mobile app, and even sending another HTTP request.



### Support Trigger Motion Detection from 3rd Party Cameras via ONVIF





## STABLE PERFORMANCE

## System-friendly for 24/7 constant running

Every second counts when it comes to security surveillance. Milesight VMS Enterprise provides an all-day surveillance solution and is always available if you require recordings or images.

## Adaptive Streams

The client adapts itself and switches between primary and secondary streams depending on its decoding performance, including memory, CPU and GPU usage, ensuring fluent live streaming.



## Intuitive Dashboard

On the dashboard, real-time system and server health can be viewed, along with storage information, camera connection status, and recording status.



## Decoding with Multiple Graphics Cards

Decoding performance and efficiency are significantly enhanced by increasing both the quantity and quality of decoding while simultaneously easing the load on the CPU.



## FAULT TOLERANCE & SECURITY

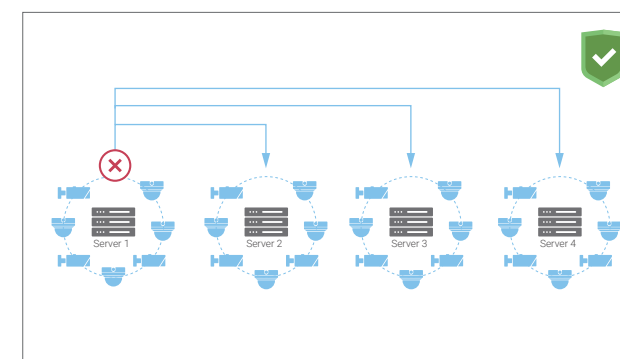
## Protect your data and system without concern

Milesight VMS Enterprise delivers dependable performance together with extensive security measures, and raises the bar on security with various privileges and multilayered secure encryption processes.

## Fault Tolerance

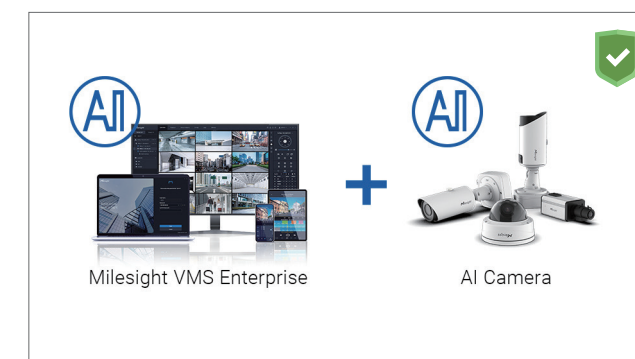
- **N+M Failover:**

Multiple servers are managed by the surveillance system, and they all share the same data. When one of the servers malfunctions, the second server assumes control and keeps recording, ensuring uninterrupted recording and boosting risk resistance.



- **Balance Distributed System Architecture:**

Increase server performance and reduce server cost with the balanced distribution of the AI video analytics from front-end AI devices and on-server AI intelligence.



## Permissions and Privileges for Higher Data Security

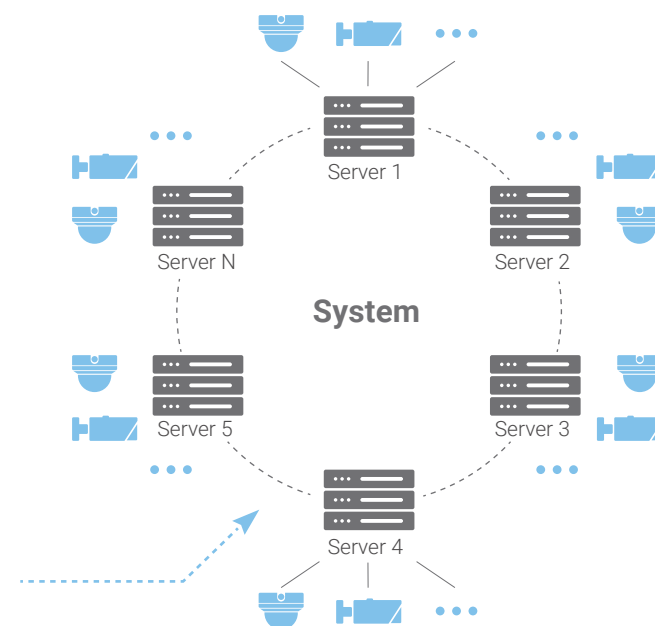




# REMOTE ACCESS

## Advanced C/S Architecture

The system architecture allows for remote monitoring and multi-user login at the same time. Each computer can be regarded as a server, and each server can be connected to numbers of cameras. Users can access shared data and streaming within the system, which is appropriate for monitoring large projects in multiple places.



# ABOUT LICENSE

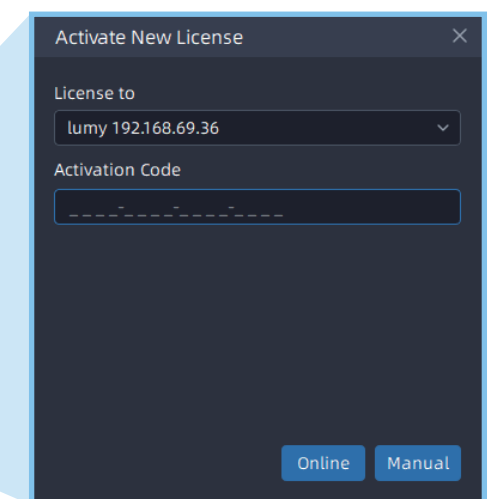
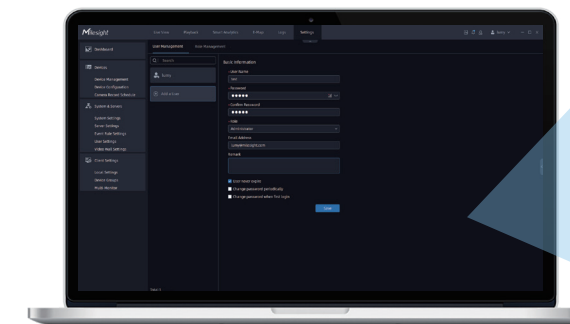
## License Type

- Channel License: Restrict the number of camera channels that can be added. (Regardless of the manufacturer)
- Video Wall License: Restrict the number of Video Wall monitors that can be active at the same time.
- On-server AI analytics: Restrict the number of channels that can be deployed with server-side AI intelligence. (3rd-party devices only; Milesight devices are not required.)

## License Key Activation

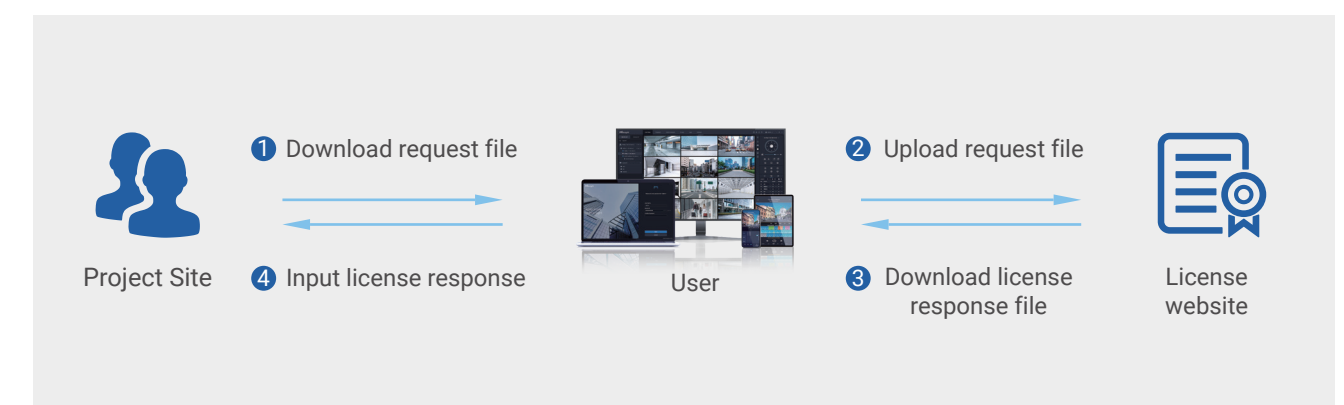
### Online Activation

Get the key from your Milesight/Distributor and enter the keycode on VMS, then start your journey successfully.



### Offline Activation (For the Project without Internet)

- ① Download request file on your VMS.
- ② Upload the VMS request file on the activation website where the computer is connected with Internet.
- ③ Get the license response file from activation website.
- ④ Input the license response file on your VMS.
- ⑤ Success!



## M-VMS Mobile



### Great Flexibility

- PTZ
- Two-way audio
- Client trigger alarm



### Playback

- Adjustable speed of playback
- 4-CH synchronous or asynchronous playback
- Playback by events & split playback

Receive Event Messages from  
Milesight VMS Enterprise





| System Specification              |                                                                                                                                                                                                                |                                                                                                                                                             |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Software                          | Milesight VMS Enterprise                                                                                                                                                                                       |                                                                                                                                                             |
| Architecture                      | Client/Server architecture                                                                                                                                                                                     |                                                                                                                                                             |
| Client                            |                                                                                                                                                                                                                |                                                                                                                                                             |
| Hardware Requirement              | CPU: Intel Core i5 @2.9GHz or above<br>Memory: 4GB or above<br>HDD: HDD/SSD<br>GPU: Recommend, discrete graphics card will be better<br>Graphic Memory: 2GB or more<br>Display Resolution: 1280 x 720 or above |                                                                                                                                                             |
| OS                                | Windows 7/8/10/11                                                                                                                                                                                              |                                                                                                                                                             |
| Live View                         | Simultaneously Playing                                                                                                                                                                                         | Up to 64-CH, self-adaptive layout                                                                                                                           |
|                                   | Multi-monitor                                                                                                                                                                                                  | Live Screen, Alarm Screen, Full Screen, E-map, Playback                                                                                                     |
|                                   | Tour                                                                                                                                                                                                           | Support (Camera Tour, Layout Tour)                                                                                                                          |
|                                   | Video Walls                                                                                                                                                                                                    | Up to 100 Video Walls per System                                                                                                                            |
|                                   |                                                                                                                                                                                                                | Display up to 64 IP Channels per screen                                                                                                                     |
|                                   |                                                                                                                                                                                                                | Custom Screen Combinations & Split                                                                                                                          |
|                                   |                                                                                                                                                                                                                | PTZ and Digital Zooming Operations                                                                                                                          |
|                                   |                                                                                                                                                                                                                | Remote Desktop Sharing                                                                                                                                      |
|                                   |                                                                                                                                                                                                                | Remote Control & Monitoring                                                                                                                                 |
|                                   | Dynamic Visualization                                                                                                                                                                                          | People Counting Live View, Traffic Detection Live View                                                                                                      |
| Function                          | Snapshot, Record, Audio, Talk, Digital Zoom, Fisheye Dewarping, PTZ Control, Stream Switching, Instant Playback, Display of Tracking Box and Area, Notification, ANPR Preview                                  |                                                                                                                                                             |
| Playback and Recording Management | Playback Channel                                                                                                                                                                                               | Up to 64-CH synchronous or asynchronous playback                                                                                                            |
|                                   | Recording Type                                                                                                                                                                                                 | Schedule/Event                                                                                                                                              |
|                                   | Playback Type                                                                                                                                                                                                  | Schedule/Event/Tag                                                                                                                                          |
|                                   | Export Type                                                                                                                                                                                                    | .mp4/.avi/.mkv/.asf/.exe (The .exe file has a built-in player.)                                                                                             |
|                                   | Export Overlays                                                                                                                                                                                                | Text/Timestamp/Image/Privacy Mask/Transcoding                                                                                                               |
|                                   | Function                                                                                                                                                                                                       | Snapshot, Audio, Digital Zoom, 1/32x~32x Slower/Faster Play Speed, Rewind Play, Fisheye Dewarping, Visual Timeline, Split Playback, Lock, Tag, Smart Search |
| Settings                          | Device Management                                                                                                                                                                                              | Channel: Support up to 2000 channels per system/128 channels per server<br>(The numbers given are recommended maximum.)                                     |
|                                   |                                                                                                                                                                                                                | Protocol: MSSP/ONVIF/RTSP/P2P/Milesight DDNS                                                                                                                |
|                                   | Video/Audio Compression                                                                                                                                                                                        | Video Compression: H.265/H.264                                                                                                                              |
|                                   |                                                                                                                                                                                                                | Audio Compression: G.711 U-Law/G.711 A-Law/AAC LC/G.722/G.726                                                                                               |
|                                   |                                                                                                                                                                                                                | Video Resolution: 12MP/9MP/8MP/6MP/5MP/4MP /3MP/1080P/UXGA/720P/D1/VGA/CIF/QCIF                                                                             |

|                                                                                                          |                                                                                                                    |                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Settings                                                                                                 | Event                                                                                                              | Alarm Type: Motion Detection, Audio Alarm, External Input Alarm, VCA Events, Smart Analytics Events, Connection Issue, System Events, Server Events, HTTP Event, Client Trigger, etc.                                              |
|                                                                                                          |                                                                                                                    | Alarm Action: Emergency Recording, Control Camera Output, PTZ Movement, Show Notification, Show Text Overlay, Email, Pop up Video, Play Sound, Send HTTP Request, Show on Alarm Screen&Full Screen, Push Alarm to Mobile APP, etc. |
|                                                                                                          | System&Servers                                                                                                     | N+M Failover, Online Update, License Activation, Decoding with Multiple Graphic Cards, Local and NAS storage, Intuitive Dashboard, Customizable User Permissions, Multiple Hotkey                                                  |
|                                                                                                          |                                                                                                                    | System Languages: English, Chinese, Traditional Chinese, Japanese, Russian, German, French, Polish, Turkish, Italian and Thai.                                                                                                     |
| Smart Analytics                                                                                          | ANPR                                                                                                               | ANPR Group Management, ANPR Settings, ANPR Search, Traffic Report, Radar Data Integration, Dynamic Visualization                                                                                                                   |
|                                                                                                          | VMS-end People Counting                                                                                            | Cross Line People Counting, Regional People Counting, People Counting Group, People Counting Report, Dynamic Visualization                                                                                                         |
|                                                                                                          | VMS-end Video Analytics                                                                                            | Motion Detection, Region Entrance, Region Exiting, Line Crossing, Loitering                                                                                                                                                        |
|                                                                                                          | Video Analytics Server                                                                                             | Graphic: NVIDIA graphic card<br>(CUDA compute capability 7.5 or higher is recommended)<br>OS: 64-bit Operating System                                                                                                              |
| E-Map                                                                                                    | Multi-layer map, Multiple attribute configuration of elements, Shared map, Event alarm flashing prompt             |                                                                                                                                                                                                                                    |
| Server                                                                                                   |                                                                                                                    |                                                                                                                                                                                                                                    |
| Hardware Requirement                                                                                     | CPU: Intel Core i3 @2.3GHz or above<br>Memory: 8GB or above<br>HDD: HDD/SSD<br>NIC: 1GB or above                   |                                                                                                                                                                                                                                    |
| OS                                                                                                       | Windows 7/8/10/11, Windows Server 2008/2012/2016/2019/2022                                                         |                                                                                                                                                                                                                                    |
| Online Clients                                                                                           | 100                                                                                                                |                                                                                                                                                                                                                                    |
| Servers                                                                                                  | Support up to 25 servers per system, 25 is a recommended maximum                                                   |                                                                                                                                                                                                                                    |
| Performance is highly dependent on PC capacity, and the recommended configuration is just for reference. |                                                                                                                    |                                                                                                                                                                                                                                    |
| M-VMS Mobile                                                                                             |                                                                                                                    |                                                                                                                                                                                                                                    |
| OS                                                                                                       | iOS: iOS 11 or above.<br>Android: Android 9.0 or above.                                                            |                                                                                                                                                                                                                                    |
| Live View                                                                                                | Layout, Group, PTZ operations including preset, patrol and pattern, Two-Way Audio, Client Trigger                  |                                                                                                                                                                                                                                    |
| Playback                                                                                                 | 0.5X/1X/2X/4X/8X/16X speed adjustable playback<br>4-CH Synchronous or Asynchronous Playback<br>4-CH Split Playback |                                                                                                                                                                                                                                    |
| Alarm                                                                                                    | Receive Event Messages from Milesight VMS Enterprise                                                               |                                                                                                                                                                                                                                    |
| Manage                                                                                                   | File Management                                                                                                    |                                                                                                                                                                                                                                    |
| Connection                                                                                               | IP Address/P2P                                                                                                     |                                                                                                                                                                                                                                    |