

Safeguarding Your Best Interests

GVD Standalone

NVR Series M3104

The Standalone and Mini-Enterprise are GVD's turnkey NVRs powered by the preinstalled HD NVR to deliver essential and high-end IP video surveillance. These NVRs are smartly designed to quickly join GVD's VMS 5.0 Suites, a cloud-based AI video system to manage up to 100,000 channels.

If your project is large and complex, you can choose to scale up to GVD VMS 5.0 Suites, a cloud-based AI video system capable of controlling 100,000 cameras while in the meantime brings hybrid storage for the flexible deployment of large video systems.





Product Highlights

■ Total Solution with VMS 5.0

GVD VMS Suites is a full spectrum IP surveillance solution, it seamlessly works with other key IP surveillance systems by stacking up your projects: X5 Failover Server, X6 Archive Server, E Series Workstations, D Series VideoWall, Smart phone Apps, cross-platforms Browsers etc.

■ Industrial Server with Auto- Maintenance

The True Enterprise with dual LAN and power redundancy and RAID storage with hot-swappable to tolerate any faults and prevent data loss. M6 also supports VMS ToolSet kits for your important configuration and systems periodically restart automatically. VMS Toolset will show all of important messages from OS and your NVR for any necessary NVR maintenance steps.

■ Dual-Eng NVR Value-Driven Pricing

A powerful NVR recording engine that can handle more IP camera streams on a single NVR machine, no need for Virtual Machine support. Increases total IP cams I/O bitrate by 70% ~ 100%, supports 70% ~ 90% more IP cameras on a single NVR

It helps customers save massive costs on surveillance system installation perfectly for Cloud projects and large enterprises.

■ IoT Seamless Integration

Moving beyond traditional video, VMS 5.0 supports deep IoT integration.

It bridges various sensors and devices, then outputs to provide a unified platform on GVD VMS for SmartBuilding and SmartCity applications.

■ Open Protocols for Integration

GVD VMS supports ONVIF, MQTT, Modbus, JSON, TCP Text, REST popular open protocols widely used in various systems and industrial electronic devices.

These are pre-built in with VMS/NVR, users don't need to invest extra effort and cost to integrate a 3rd-party system.

VMS also features powerful alarm management that is capable of sending TCP messages to alert security operators.

These advantages make GVD VMS highly eligible for many promising solutions such as SmartCity, Green Building, Traffic Control, Automation Production etc

■ AI metadata Search and Time-Sharing

GVD VMS is designed to support quick Ai cameras and Ai Server plug-in solution by ONVIF Profile-M and GVD ready-to-go Ai Agent JSON Interface.

GVD maximizes ROI on expensive AI servers. GVD VMS introduces Time-Sharing modeling.

This innovative feature allows AI Server resources to be distributed across multiple IP cameras on the VMS, significantly enlarging the scope of AI analytics without requiring additional server investment.

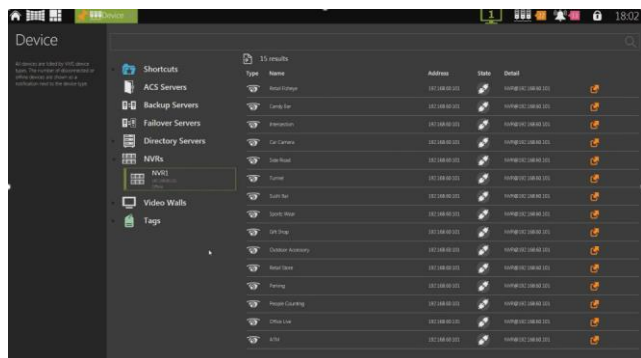




VMS Features

100,000 IP cameras support

GVD E4200 can team up with a variety of NVR models featured by GVD to handle 64~100,000 channels with unique “Device Management” & “Tag Management” functions.



Ai Meta Data Search

The GVD’s new AI Smart Search offers powerful integration through a simple, standard JSON-based interface, can easily connect any AI cameras to GVD VMS platform.

The GVD VMS 4.0 AI Data Search GUI features an intuitive, user-friendly design that allows users to get hands-on quickly and efficiently.



Videowall synchronous display

An operator sitting at the management console (E4200) of VMS platform can freely change what to output on the videowall, by using Drag-and-drop to view live-video, play recorded video, change video pattern, start/stop video touring, etc.

iGlace Dashboard

iGlace is to give operators a quick comprehensive view of system status: Alarm, NVR, IP cams, network statistics, video analytics to ensure all operation and future maintenance.

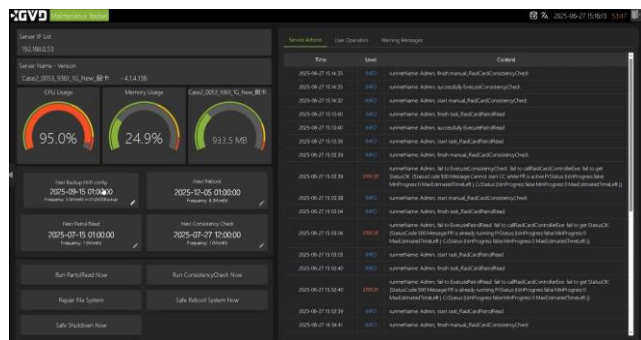


Seamless Video on eMap

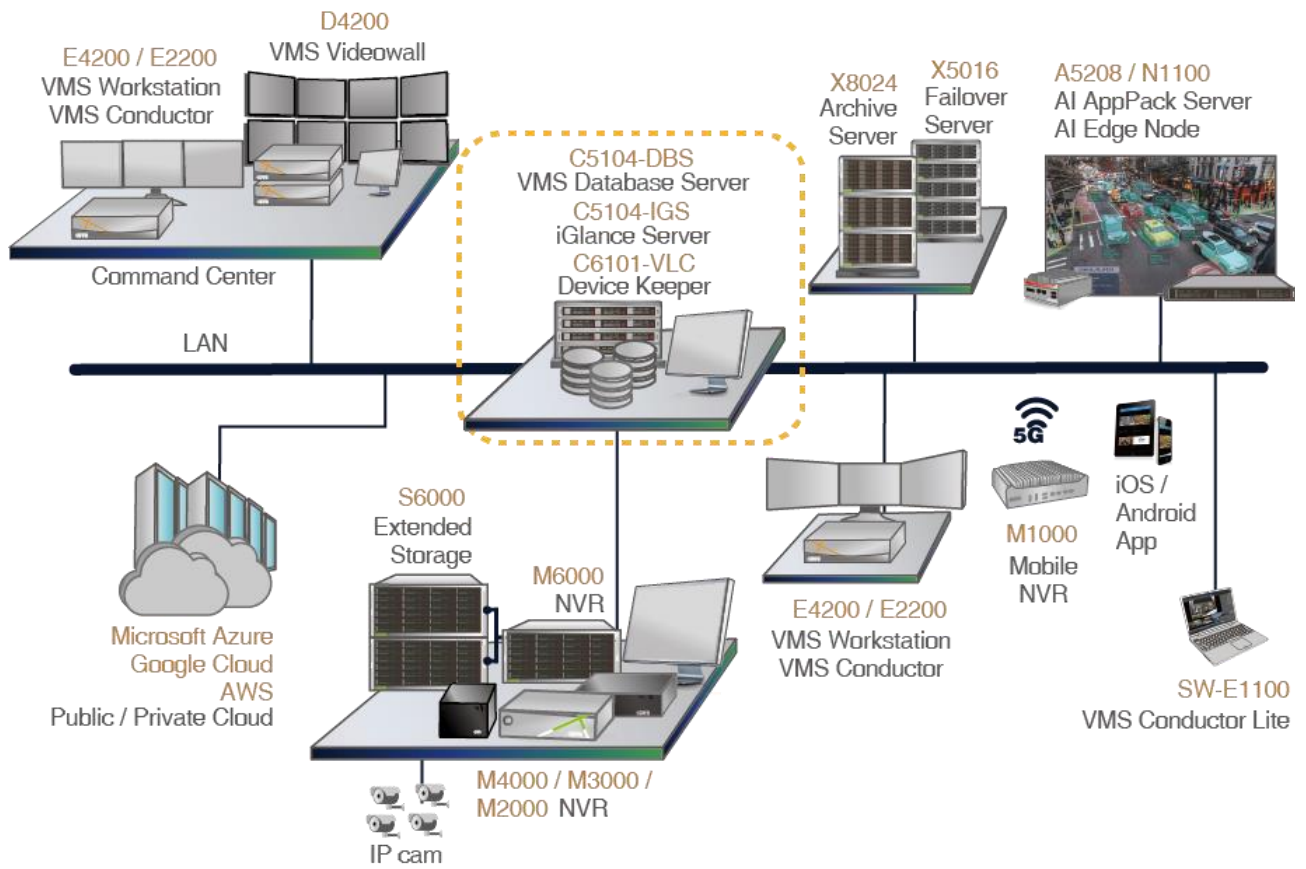
GVD VMS designed for video HA (high availability) to fetch the sources of the video from NVR or the redundant systems such as Failover server. Such HA videos are embedded on GVD eMap for easy and intuitive operation.

Automatic Self Maintenance

VMS 4.0 ToolSet kits for your important configuration and systems periodically restart automatically. VMS Toolset will show all of important messages from OS and your NVR for any necessary NVR maintenance steps.



System Architecture



Hardware Specifications



| Product | | M3104-VS |
|-------------|--------------------------|---|
| Description | Standalone NVR | |
| System | CPU | Intel® Core™ Ultra 5 Processors |
| | Memory | 16G |
| | Operating System | Windows® 11 IoT Enterprise |
| | Watchdog | Hardware watchdog & software watchdog |
| Storage | Interface | 3.5" SATA III HDD |
| | Hard disk trays (bays) | 4 pcs |
| | Storage capacity | 4 x 20TB |
| Display | Output | 2 x HDMI; 2 x DisplayPort |
| | Local display resolution | 4K |
| Interface | USB port | Front: 2 x USB3.2 + 2 x USB2.0; Rear: 4 x USB3.2 + 2 x USB2.0; |
| | Audio port | Front: 1 x mic-in Rear: 1 x mic-in, 1 x SPK out, 1 x line-in |
| | Serial COM port | N/A |
| Network | LAN port | 2 x 2.5Gigabit Ethernet |
| Power | Voltage | 100~240 Vac, 50-60 Hz |
| | PSU | 500W |
| | Consumption (w/o HDD) | 110W |
| Environment | Operating temp. | 0°C~40°C (32°F~104°F) |
| | Storage temp. | -10°C~60°C (14°F~140°F) |
| | Operating humidity | 0%~90% |
| | Storage humidity | 5%~95% |
| Mechanic | Form factor | Tiny Cube |
| | Dimensions(W)x(H)x(D) | 216 x 198 x 332 mm |
| | Certification | Safety certification : CB , BSMI , cTUVus EMI certification : FCC , CE , BSMI , RCM , VCCI |
| | Net weight w/o HDD | 3.5 Kg |

Software Specifications



| Software | | M3104-VS |
|------------------------------|---------------------------------------|--|
| Description | | NVR Manager |
| Video Recording | IP cam license | 8,16,24,32,48 |
| | Recording rate | Max. 128Mbps |
| | Rec. resolutions | D1, 1.3~20 megapixels |
| | Recording mode | Full-time recording, manual recording, recording by schedule, event, alarm, video motion detection |
| | Video codec | H.265, H.264, MPEG4, M-JPEG, MxPEG |
| | Audio codec | G.711, G.726, AAC |
| | Streaming type | Unicast & Multicast |
| | Video display & management | Local Display (AVS enabled) |
| No. of live video streams | | 64 |
| Display pattern | | 1, 2, 3, 4, 5, 6, 8, 9, 12, 13, 16, 18, 24, 25, 36, 48, 64 |
| Live-view operation | | ROI, ePTZ, corridor mode, software de-warp, digital zoom in/out, onscreen PTZ |
| ONVIF | | ONVIF Profile-S |
| Synchronous playback | | Up to 16 channels |
| Playback controls | | Forward/backward playback, pause, jump to next/previous frame, go to date, speed controls, go to some time later/ago (0.5/1/5 minutes) |
| Video export | | Via USB (*.AVI, *.AVA & *.MKV supported), digital watermark |
| Video search | | By time, alarm, event, missing object, foreign object, E-Fence, people counting, transaction data from POS |
| PTZ | | Controlling device |
| | Operation | Direction controls, zoom in/out, preset, patrol |
| VCA | Features | E-Fence, video motion detection, people counting, missing/foreign object search |
| | Event search | Search for a missing or foreign object; search for an event of people counting, video motion, or E-Fence |
| | Trigger source | Video loss, sensor trigger, HDD crash, system crash, abnormal transaction from POS, E-Fence, video motion detection, people counting |
| | Reaction | User-definable text message, video pattern popup, e-mail, output alarm signal, trigger recording, PTZ preset |
| | Setup | A Rule Wizard for flexible setup |
| Alarm | Trigger source | Video loss, sensor trigger, HDD crash, system crash, abnormal transaction from POS, E-Fence, video motion detection, people counting |
| | Reaction | User-definable text message, video pattern popup, e-mail, output alarm signal, trigger recording, PTZ preset |
| | Setup | A Rule Wizard for flexible setup |
| | DI / DO points | 48 x inputs; 48 x outputs |
| Remote Access Clients | Web client | IE 9.0, 10.0, 11.0 |
| | App client | iOS 10 and above; Android 5.0 and above |
| | PC thin client | VMS (E4200), CMS (SW-E2200-CW03), CMS Lite (E90-Window 8 & 10) |
| | Number of clients | 5 |
| POS | License | 8 units |
| | Integration | Integrable with all brands via POS filters |
| | Transaction data view | Pattern-view with both transaction data and relevant videos |
| | Data search/retrieval | Search by time, keyword or price to retrieve transaction data with relevant video |
| | POS alarm | Alarm setup by item or value; supporting popup alarm, email alarm, text message alarm, etc. |
| System | System update | NVR software update |
| | Backup & recovery | Yes, by Windows Backup |
| | Event logs | Event logs of system, cameras, users, etc. |
| | Languages | 20+ languages are supported, including English, Spanish, French, Dutch, Italian, Japanese, Chinese, etc. |