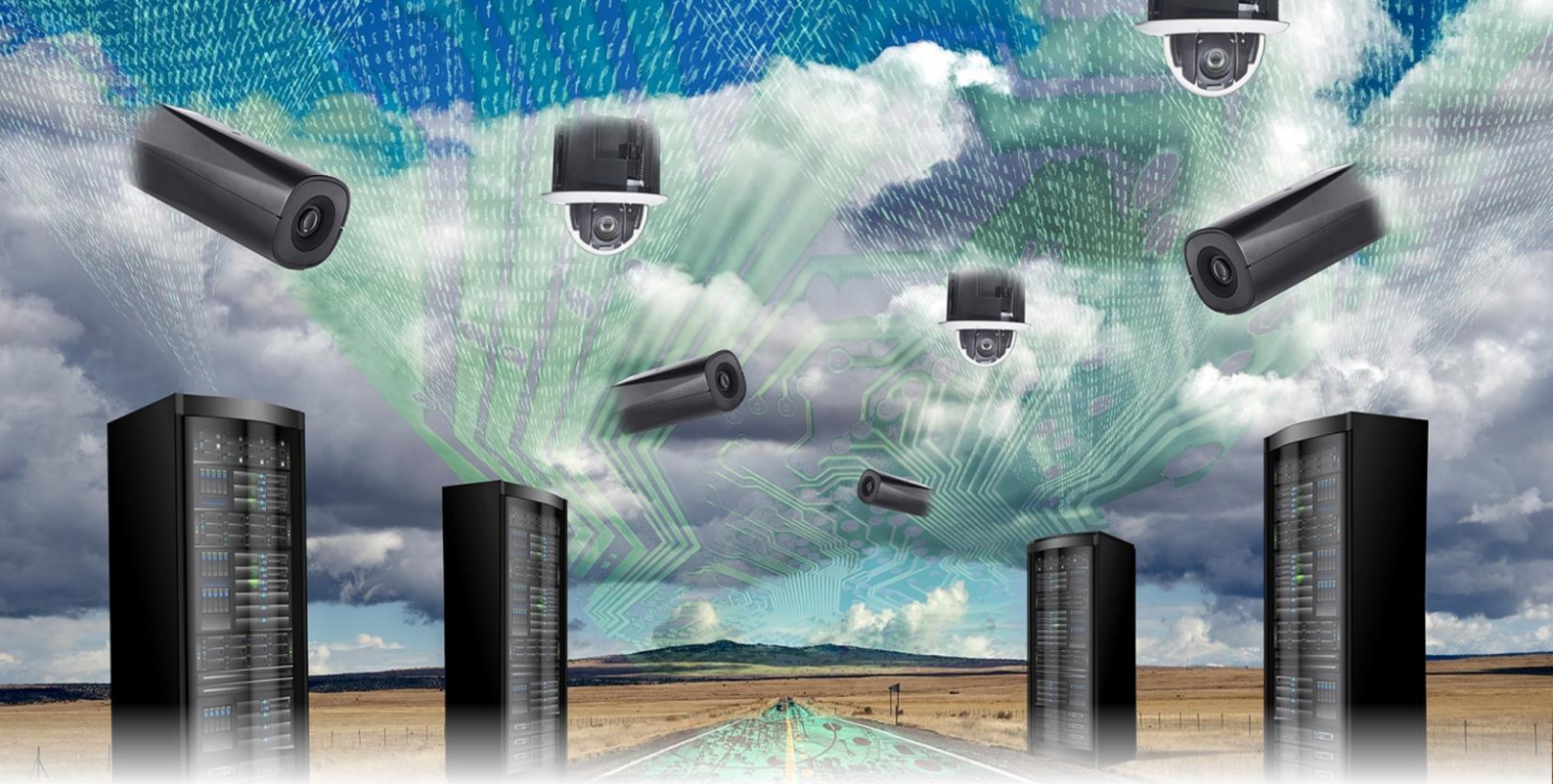




Safeguarding Your Best Interests

GVD Mini-Super NVR

M3104, M2102

GVD's turnkey Mini-Super Series NVRs, led by the new M3104 and M2102, are now supercharged by our revolutionary Turbo-Engine technologies. This breakthrough hardware acceleration increases recording performance by an incredible 4 to 6 times, allowing the M2102 to support up to 128 IP cameras and the M3104 to support up to 64 IP cameras on a single system. Designed for effortless enterprise-grade scalability, these high-capacity NVRs seamlessly join GVD's VMS 5.0 Suites, a cloud-ready AI video ecosystem capable of managing up to 100,000 channels.





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.

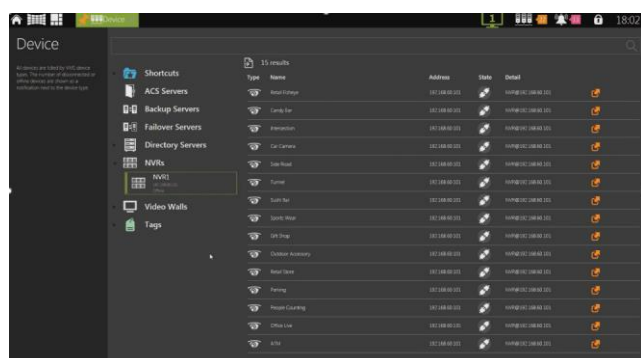




VMS Features

■ 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.

■ iGance Dashboard

iGance 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.

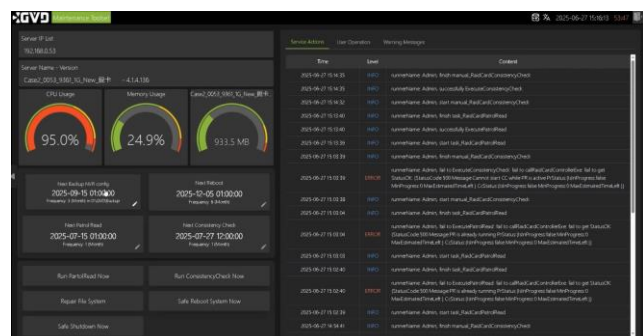


■ Seamless Video on eMap

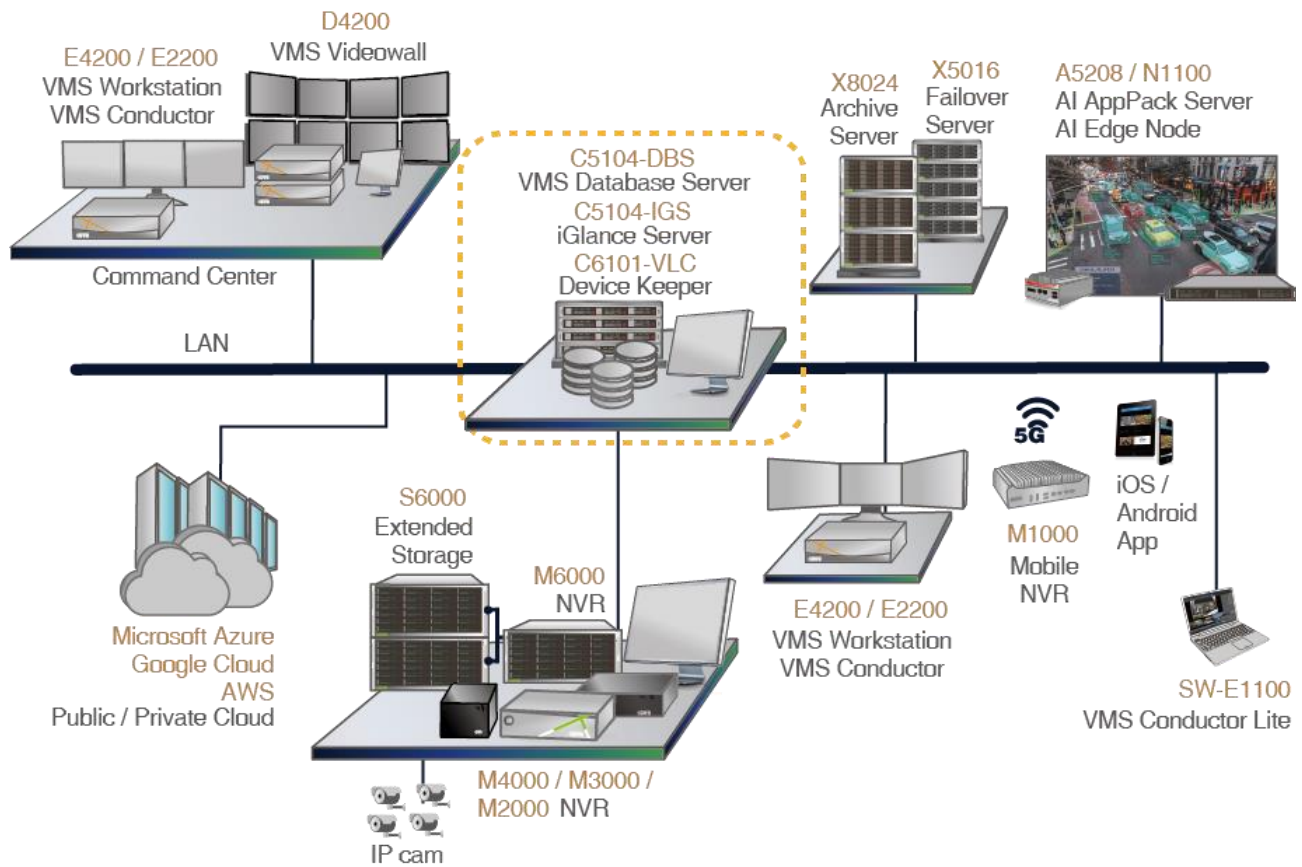
GVD VMS designed for video HA (high availability) to fetch the sources of the video from NVR or the redundant systems such as Failover server. Such HA videos are embedded on GVD eMap for easy and intuitive operation.

■ 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	M2102
Description		Mini-Super NVR	
System	CPU	Intel® Core™ Ultra 5 Processors	Intel® Core™ i9 Processors
	Memory	16G	32G
	Operating System	Windows® 11 IoT Enterprise	
	Watchdog	Hardware watchdog & software watchdog	
Storage	Interface	3.5" SATA III HDD	2.5"/3.5" SATA III HDD
	Hard disk trays (bays)	4 pcs	2 pcs for 2.5" or 1pcs for 3.5"
	Storage capacity	4 x 20TB	2 x 4TB
Display	Output	2 x HDMI; 2 x DisplayPort	1 x HDMI; 1 x DisplayPort; 1 x VGA
	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;	Front: 2 x USB3.2(1 x Type C) + 2 x USB2.0; Rear: 2 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	Front: 1 x mic-in, 1 x Ear-out Rear: 1 x mic-in, 1 x line-in, 1 x line-out
	Serial COM port	N/A	1 x RS232 (Max. 4) / 1 x RS232 / 422 / 485, Support 5V / 12V
Network	LAN port	2 x 2.5Gigabit Ethernett	1 x GbE; 1 x 2.5GbE
Power	Voltage	100~240 Vac, 50-60 Hz	
	PSU	500W	120W
	Consumption (w/o HDD)	110W	70W
Environment	Operating temp.	0°C~40°C (32°F~104°F)	0°C~50°C (32°F~122°F)
	Storage temp.	-10°C~60°C (14°F~140°F)	
	Operating humidity	0%~90%	10% ~ 90% RH, non-condensing
	Storage humidity	5%~95%	
Mechanic	Form factor	Tiny Cube	XPC
	Dimensions(W)x(H)x(D)	216 x 198 x 332 mm	200 x 72 x 238 mm
	Certification	Safety certification : CB , BSMI , cT UVus EMI certification : FCC , CE , BSMI , RCM , VCCI	CB, CE, BSMI, cT UVus, FCC, RCM, RoHs, VCCI
	Net weight w/o HDD	3.5 Kg	2.2 Kg

Software Specifications



Software		M3104	M2102
Description		NVR Manager	
Video Recording	IP cam license	8,16,24,32,48, 64	128
	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)	300fps@D1	
	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	Mouse, K205 Keyboard	
	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	
System	POS alarm	Alarm setup by item or value; supporting popup alarm, email alarm, text message alarm, etc.	
	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.	