

# M4108

## 4K High-Resolution Mini Enterprise NVR

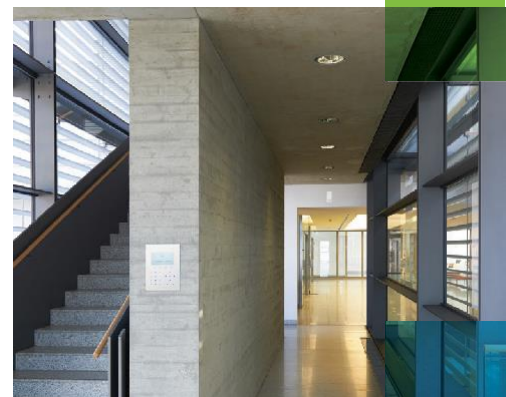
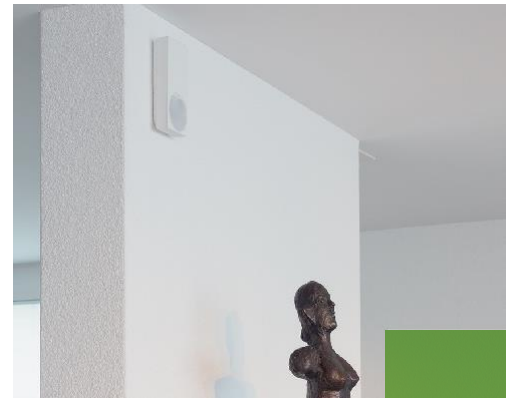


The Mini-Enterprise NVR M4108 is the new member of GVD's intelligent NVR family. As a turnkey NVR powered by "HD NVR", the M4108 can well protect your business and profits by advanced video surveillance.

The M4108 has all the advantages from the M4 family, including 10TB HDD to bring a total of 80TB storage and optional RAID 0, 1, 5, 6, 10 for data insurance, and it also possesses some characteristics that excel its kindred: It is capable of 4K high-resolution display by the 6th-gen CPU from Intel® it uses. It also features rich display outputs including each an HDMI, DVI, VGA & DisplayPort to extend the video view onto a triple of displays. It is, therefore, a competent NVR for small towns, campuses and small- and medium-sized factories.

The M4108 is smartly designed to quickly join GVD's large-scale centralized video platforms, the "*Central Management Platform*", which manages up to 10000 channels.

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## Features & Benefits

### ✔ Virtual Hard Disk (VHD) - Painless system recovery

Windows-based system image tool to take a snapshot of system status and NVR software settings to recover your system within 5 minutes once a severe system failure or OS/software corruption occurs in the future. This tool can reduce not only RMA but also the need for on-site support. For users, everything just falls back into place so soon.

### ✔ Redundancy - Better reliability than most NVRs

The NVR has some hardware components in pairs, including dual LAN ports and dual power units. Dual LAN ports can protect the NVR from losing data connection while dual power units ensure non-stop power supply. The NVR also uses dual watchdogs, in that a hardware watchdog is to monitor system health and a software watchdog is to make sure the important programs run correctly. Also provided is RAID setup to prevent data loss in case of hard disk failure.

### ✔ Bandwidth economy - less demand on network bandwidth

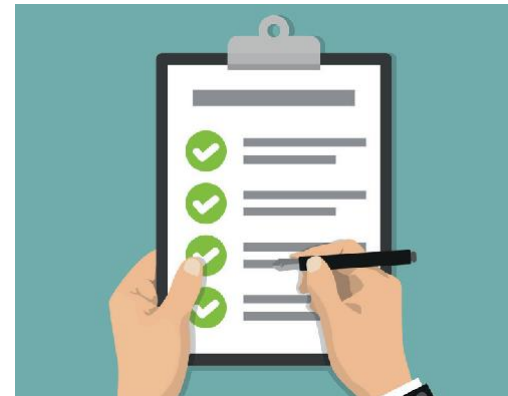
Network bandwidth is the critical consideration when it comes to IP video surveillance system, especially when a large group of cameras is in there. To diminish the impact of limited bandwidth, the NVR adopts a variety of techniques such as TSE (Time Sector Engine), ROI, Turbo Mode, Adaptive Video Streams, Playout Control, Live Multicast, Sub channels and so on to maintain video quality and fluent streams.

### ✔ Triple-monitor display – broadens viewing horizons

The NVR extends the video view onto a triple of displays. Max. 80 simultaneously live videos are available on each of them in your workstation, and the NVR uses techniques such as TSE (Time Sector Engine), ROI, Turbo Mode, Adaptive Video Streams, Playout Control, Live Multicast, and Sub channels to handle HD video and large video data, even in limited-bandwidth situations.

### ✔ POS / ATM integration – powerful data retrieval

To video-document cashier payment collection or ATM transaction, GVD HD NVR Manager is made to integrate with eight cash registers or ATMs. Powerful data search (by number or by text) and alarm management are also provided to comply with EU standards and to get certification from Unfallverhütungsvorschrift Kassen (UVV Kassen), which is the federal regulation of Germany to protect the cashiers in finance institutions from accidents.



### Software Features:

- Limited bandwidth solution – Adaptive Video Streams
- Reinforced security – Video Content Analysis
- Quick integration with 3<sup>rd</sup>-party systems – POS & ATM solutions
- Full resolution for megapixel cameras – ROI & ePTZ
- Hardware health monitor with alarm notice – Rule Wizard
- No blind spot – Fisheye dewarp & ePTZ



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### ✔ Region of interest – gets the most out of a megapixel cam

The HD NVR Manager features ROI (Region of Interest), which takes advantage of ePTZ for non-mechanic cameras to perform digital PTZ. Use an ROI to get the extreme close-up of a small zone from a high-resolution video without losing high sharpness. Besides, ROIs can be saved with video patterns to facilitate video viewing.

### ✔ Dual codec & sub channel – optimized video live-view, with 4k & H.265

Among multiple video profiles of a camera, GVD HD NVR Manager can send a low-profile sub-stream instead of the high-profile mainstream whenever the network is congested. The dual codec is also supported to allow different compressions for live video view, playback and recording. Besides, GVD M4108 uses a 6th-gen CPU from Intel® to deliver 4K high resolution, and GVD's generic RTSP now supports H.265, a video compression standard proven to be up to 50% more effective than H.264 on video storage, network infrastructure, and hardware costs.

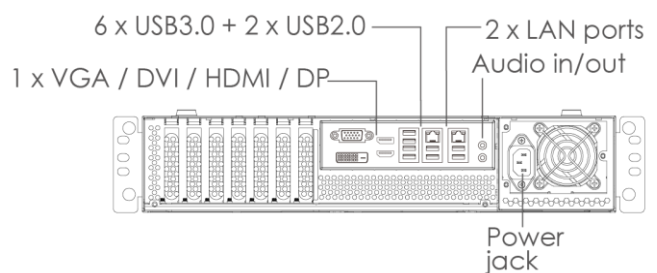
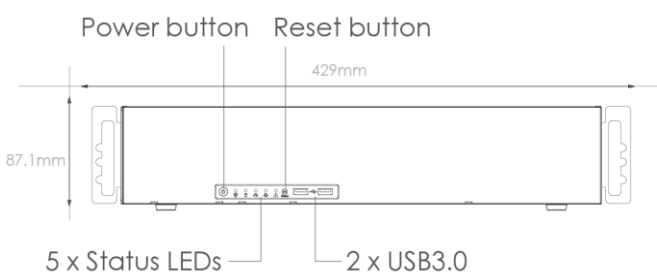
### ✔ Video patterns – the most flexible video display

The HD NVR Manager features a collection of video “patterns” to deliver flexible video display. A “pattern” is an onscreen grid with each division in it outputting an individual video, live or recorded, or showing a graphic file such as a floor plan. The featured patterns are provided with various layouts to meet your needs best. Four video playing speeds are given with a pattern to overcome limited network bandwidth and to optimize CPU usage.



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Hardware Technical Data	
Description	Mini Enterprise NVR
System	
• CPU	Intel® Celeron® G3900
• Memory	8G
• Operating system	Windows 10 IOT
• Watchdog	Hardware watchdog & software watchdog
Storage	
• Interface	3.5" SATA HDD
• Hard disk trays (bays)	8 pcs
• Storage capacity	8 x 10TB
• RAID level	NA
Display	
• Output	1 x VGA, 1x DVI-D, 1 x HDMI, 1 x DP
• Local display resolution	4096 x 2304
Interface	
• USB port	Front: 2 x USB3.0; Rear: 6 x USB3.0 & 2 x USB2.0
• Audio port	Rear: 1x mic-in, 1x line-out, 1 x line-in
• Serial COM port	NA
Network	
• LAN port	2 x Gigabit Ethernet
Power	
• Voltage	100~240V
• Avg. consumption (w/o HDD)	< 135W
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	
• Chassis	2U rackmountable chassis w/ handles
• Certification	CE, FCC, EN50130
• Dimensions (W x H x D)	429 x 87.1 x 540 mm
• Net weight w/o HDD	12 kg





## 4K High-Resolution Mini Enterprise NVR

Software Technical Data		
Type	Item	Description
Video recording	IP camera license	16, 32, 48
	Recording rate	Max. 256Mbps
	Recording resolution	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, ACC
	Streaming type	Unicast & multicast
Video display & management	Local display (AVS enabled)	420@D1
	No. of live video streams	128
	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 2.6, Profile-S
	Synchronous playback	Up to 16ch
	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



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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
Remote access clients	Web client	IE 9.0, 10.0, 11.0
	APP client	iOS (iPhone, iPad), Android
	VMS/CMS & PC thin client	VMS(E300), CMS(E150), CMS Lite (E90-Window 7/8/10)
	Number of clients	5
POS	License	8 units
	Integration	Integrable with all brands via GVD 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 VHD (virtual hard disk)
	Event logs	Event logs of system, cameras, users, etc.
	Languages	20+ languages are supported, including English, Spanish, French, Dutch, Italian, Japanese, Chinese, etc.
Video recording	IP camera license	16, 32, 48
	Recording rate	Max. 256Mbps
	Recording resolution	D1, 1.3~20 megapixels

\* Total weight of the product inclusive of the weight of its accessories and packaging.

