



## Powerful engines for your security base

# M6 True Enterprise NVRs

M6236, M6036, M6024, M6016, M6012

& Extended Storage Servers S6044 & S6024

The **True Enterprise** are GVD's server-grade NVRs designed for enterprise high-capacity applications. They have redundant hardware, including dual power units and dual LAN ports, to allow the extra robustness for enterprise activities.

For video read/write, the NVR allows up to 128 channels and handles up to 384 Mbps for 24 x 7 recording. For storage, the NVR alone can bare max. 360TB while the storage can even reach

800TB when you connect an optional storage server. Also on option is a backup server to keep an insurance copy of your video data.

The **True Enterprises** lineup is designed to expand to **CMS** or **VMS**, two of GVD's large centralized video platforms, simply thru easy add-on of GVD products. The **CMS** (Central Management System) allows 600 channels while the **VMS** (Video Management System) up to 8,000 channels.

If you are looking for a robust NVR for long and reliable service, look no further than GVD's **True Enterprise** NVRs.

- License of 32, 48, 64, 96 or 128-channel on option
- Built-in with 36, 24, 16, or 12 HDD trays
- Storage servers **S6024** & **S6044** on option to get 240TB or 440TB more to the NVR
- RAID 0,1,5,6,10 to protect video data
- Excellent reliability with redundant hardware
- Outstanding 24x7 video recording at 384 Mbps





## Product Highlights

- Virtual Hard Disk (VHD)
  - Painless system recovery

A “virtual hard disk” (VHD) is a Windows-based system image tool to take a snapshot of system status and NVR software settings to recover your corrupted system within 5 minutes. This tool can reduce not only RMA but also the need for on-site support.

- Extra Robust
  - 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. Watchdogs are also a duo, which covers a hardware watchdog to monitor system health and a software watchdog to make sure important programs run properly. RAID is also there to prevent data loss in case of hard disk failure.

- Time Sector Engine (TSE)
  - Excellent read / write

The NVR has high data transmission rate at max. 384 Mbps. It handles high bandwidth throughput up to 600 Mbit/s over 1G LAN port, up to 128 IP cameras @ 3Mb/s, and processes video at



Immediate video processing

high speed with 150ms~190ms latency. This exclusive TSE brings the best real-time PTZ controls .

- Modbus support & TCP messages
  - Promise smart buildings and smart cities

The NVR support Modbus, a popular serial communication protocol widely-used for the connection of industrial electronic devices. No extra effort and cost is needed to quickly include a 3rd-party system. The NVR also features powerful alarm management capable of sending TCP messages for alarm alerts. The NVR is highly competent for some promising solutions such as **Smart Buildings** for **DCS** (distributed control system) and **Smart Cities** for **CAP** (common alerting protocol) such as **IBM IOC**.

- Total Solution
  - Solves multiple problems

GVD has a complete product line to meet the needs of almost every industry for large-scale video management. You can expand the NVR to a centralized video management platform, for example the **VMS**, then a control center (**E300**) will be available, and a video wall (**D300**), backup server (**X6024**), a failover server (**X5016**) and an integration gateway (**C5001**) are allowed to the system. Software-wise the NVR is also designed to do a whole variety of works, for example to incorporate POS and ATM, perform video content analysis, manage alarms and so on.



## Software Features

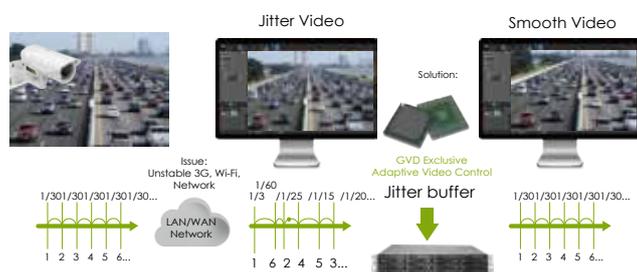
### System hardware diagnostics & enhanced alarms

The main management software, **HD NVR Manager**, features some hardware health facilities, for example a hardware tree listing all critical hardware with the important data called out such as chipset temperature, fan speed, fan RPM, CPU temperature, CPU voltage, SSD temperature and so on. When a hardware component goes out of control, the software will launch an alarm to warn you .



### Smooth video streams in unstable networks

The **True Enterprise NVR** features **Playout Control**, a technique that uses dynamic buffer size to tolerate poor network conditions, whether with 3G or WiFi.

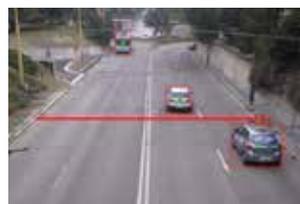


### Zero downtime

For mission critical projects, a **Failover Server X5016** is an option for the **True Enterprise NVRs**. The **X5016** is a turnkey product to take over a broken NVR within 45 seconds. It has advanced design to allow non-stop video recording and seamless video display. The failover solution is extra capable with **N+M** feature for an **X5016** to watch over up to 10 NVRs.

### VCA video for law enforcement

The NVR features sophisticated **Video Content Analysis**, including **VMD** (Video Motion Detection) that detects moving objects, **E-Fence** that discerns objects crossing a virtual line while **People Counting** calculate how many people have crossed a virtual line by one direction and/or the other. Users can set up an interested VCA event for alarms and retrieve the relevant VCA video with the powerful search feature. In some worst cases VCA can provide you with the evidence for law enforcement.



E-Fence



People-Counting

# Specifications



Product	M6236	M6036	M6024	M6016	M6012
Description	True Enterprise NVR				
System	CPU	2 x Intel® Xeon® E5-2603 V4		Intel® Xeon® E3-1225 V3	
	Memory	16G	8G		Intel® Celeron® G1820
	Operating System	Windows 7 Embedded			
	Watchdog	Hardware watchdog & software watchdog			
Storage	Interface	3.5" SATA HDD			
	Hard disk trays (bays)	36 pcs		24 pcs	16 pcs
	Storage capacity	36 x 10TB		24 x 10TB	16 x 10TB
	RAID level	RAID 0, 1, 5, 6, 10		RAID 0, 1, 5, 10	
Display	Output	1x DVI-D, 2 x HDMI (2 x DisplayPort on option)			
	Local display resolution	1920 x 1080			
Interface	USB port	Front: 2 x USB2.0; Rear: 2 x USB2.0			
	Audio port	Rear: 1x mic-in, 1x line-out, 1 x line-in			
	Serial COM port	Rear: 1 x RS232 (DB9); Onboard: 1 x RS232 (header)			
Network	LAN port	2 x Gigabit Ethernet; 1 x IPMI			
Power	Voltage	100~240 Vac, 50-60Hz			
	Redundancy	Yes			
	Avg. consumption (w/oHDD)	373W	365W	220W	192W
Environment	Operating temp.	5°C~35°C (41°F~95°F)			
	Storage temp.	-40°C~70°C (-40°F~158°F)			
	Operating humidity	8%~90%			
	Storage humidity	5%~95%			
Mechanic	Chassis	4U rackmount		3U rackmount	2U rackmount
	Certification	CE & FCC			
	Dimensions (W)x(H)x(D)	437 x 178 x 699 mm		437 x 178 x 660 mm	437 x 132 x 647 mm
	Net weight w/o HDD	35 kg		34 kg	32.7 kg
Expansion	Extended storage	1 x <b>S6044</b> or 1 x <b>S6024</b>			
<b>Software</b>					
Video recording	IP camera license	64, 96, 128		64, 96	32, 48, 64
	Recording rate	Max. 384Mbps			
	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	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 2.2, 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			
Alarm	Setup	A Rule Wizard for flexible setup			
	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			
Remote access clients	Setup	A Rule Wizard for flexible setup			
	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 Life(E90-Winodw 7/8/10)			
POS	Number of clients	5			
	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.			

\* All specs are subject to change without notice.

Customer Service:

Support: support@gvdigital.com / Sales: sales-all@gvdigital.com

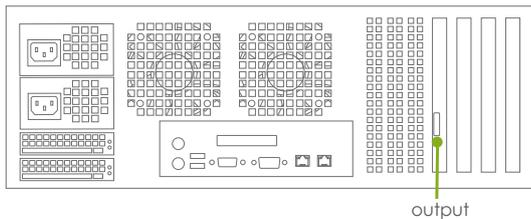
# S6044 & S6024

## Rackmountable extended storage

GVD Extended Storage Servers S6024 & S6044 have respectively 24 and 44 hard disk trays at its front to add 240TB and 440TB to a **True Enterprise NVR**. Simply connect an **S6044** to an **M6036 True Enterprise NVR** by the SAS connectors at their rears to boost the storage of the NVR to 800TB. Together they bring an ideal solution for the large-scale or mission-critical projects that need to be online around the clock. They are your best choice for shopping complexes or large banking business.

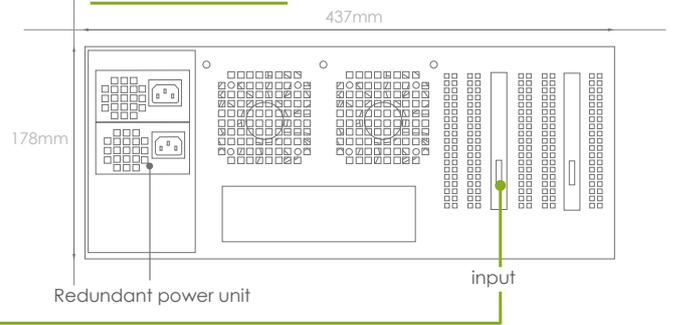


True Enterprise M6 NVR



output

S6024



Redundant power unit

input

Product	S6044	S6024	
Description	Extended Storage Server (DAS Server)		
Storage	Interface	3.5" SATA HDD	
	Hard disk trays (bays)	44 pcs	24 pcs
	Storage capacity	44 x 10TB	24 x 10TB
	RAID level	Depending on the host	
Power	Voltage	100~240 Vac, 50-60Hz	
	Redundancy	Yes	
	Avg. consumption	120W	98W
Environment	Operating temp.	5°C~35°C (41°F~95°F)	
	Storage temp.	-40°C~70°C (-40°F~158°F)	
	Operating humidity	8%~90% (non-condensing)	
	Storage humidity	5%~95% (non-condensing)	
Mechanic	Chassis	4U rackmountable chassis	
	Certification	CE & FCC	
	Dimensions (W)x(H)x(D)	437 x 178 x 699 mm	437 x 178 x 660 mm
	Net weight w/o HDD	43.09 kg	34 kg