

## 8-lane LPR with 24 Full HD channels Comprehensive for a wider variety of parking applications

For years, GVD had engaged in video content analysis and reaped the preliminary harvest by introducing some sophisticated VCA features including Missing Object Search, Foreign Object Search, E-Fence and People Counting. The most recent grain GVD proudly crops is the **M4106 LPR**-NVR, a 2-in-1.

As a derivative from GVD 4K Mini Enterprise M41 Series, the M4106 LPR-NVR is hardware-wise not too heavy and not too light but comes just right. Software-wise the M4106 LPR-NVR is powered by GVD HD NVR, a suite of software programs including sophisticated VCA applications with outstanding LPR performance.

Supporting max. 48 full HD channels, the **M4106 LPR-**NVR can recognize a total of 16 car lanes and capture millions of snapshots.

This NVR also doubles as a 6-HDD server, which is simple, reliable and flexible, and very easy to scale up. You can expand your video system to 600 to 10,000 channels on GVD Central Management Platform

If you are looking for a robust, reliable and flexible NVR for your massive LPR project, look no further than GVD's **M4106 LPR**-NVR.



## **Software features**

#### Interested vehicles detection

GVD LPR application lets you review the in-and-out records in your business premises effortlessly. You can create and import a list in the NVR Manager to get live notification of an interested vehicle. You can also run a search in the NVR Manager's Alarm Mode to retreive the video of that vehicle passing through the gate as long as it is blacklisted or whitelisted in the NVR Manager.



First create an interest list with Excel



Then imports one or more interest lists in the software



The "Sidekick" highlights a matching vehicle when it passes through the gate.

### Powerful data retrieval

Like GVD's other business computing features such as **POS** and **ATM**, GVD **LPR** also presents powerful data search and retrieval, including search by time, by a license plate or by interest lists. GVD makes it even more simple to retrieve data with a "fuzzy search", which finds a string not exactly matching the whole criterium but allows a character mismatching.



1 First use the Rule Wizard to create an LPR event rule.



2 Then retrieve associated video with the software's Alarm Mode to track the activity of an interested vehicle.

### Live notifications for 1st responders

The **NVR Manager** lets you define LPR events to trigger alarms, such as license plate hits or suspect vehicle alert so a pre-defined action can be taken such as shutting down vehicle gates or activating intercoms through the control center.



• First use the Rule Wizard to create an LPR event rule.





## Software features

## A deeper look into LPR events

On the NVR, you can query LPR events (by time, by a plate number, or by an interest list) as long as you have an associated rule set up in the software. On the **Central Management Platform**, however, you can take a deeper look into these events by documenting your observation on-video with a text comment, video or screenshot, and export a series of such document to an interactive PDF file which includes not just text description and support images but also hyperlinks that bring you quickly to an associated video.

## Layer 1

Easy query on the NVR



Layer 2

Deeper look
into LPR events
on the Central
Management
Platform

# Quick integration with 3rd-party systems

The M4106 LPR-NVR comes with Modbus support, the most popular and widely used serial-comm protocol. The NVR has a Modbus Slave to collect status data from a

video channel while the **Central Management Platform** supports Modbus Master & Slave to send & receive 3rd-party system data, and the open platform design also saves

much trouble.









₩a28F Corridor light

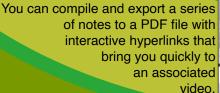
First use the Rule Wizard to create an LPR event rule.

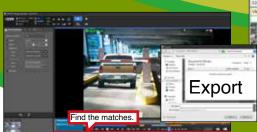


Then run a search for LPR alarms in the software's Alarm Mode.

Finally find the matches and export.



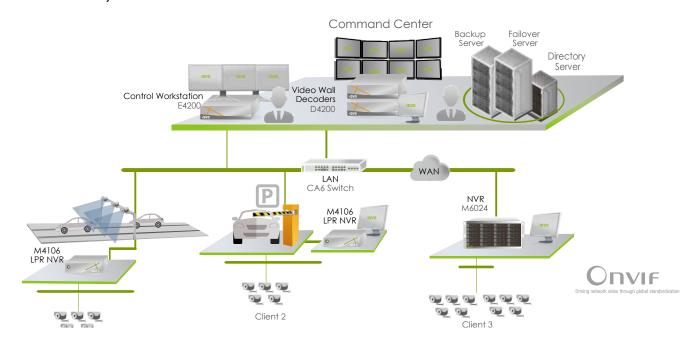




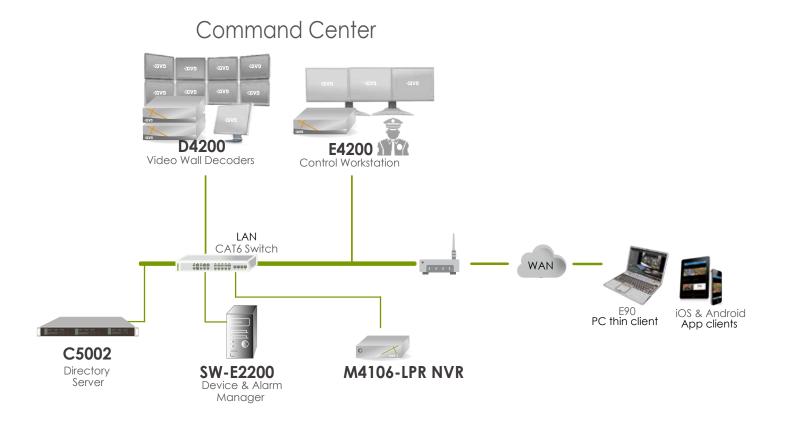


# System architecture

# GVD Central Management Solution for 600~10,000 channels



# **Remote clients**



## M41 LPR-NVR

## Specifications



Model na	me	M4106 LPR-NVR 🙃		
Order information		M4106-C024-LPR04 (EOL	M4106-C024-LPR08 EOL	M4106-C016-LPR04 (EOL
Description		LPR NVR		
System	CPU	Intel® Core™ i5-6500		
,	Memory	8G		
	Operating System	Windows 7 Embedded		
	Watchdog	Hardware watchdog & software watchdog		
Storage	Interface	3.5" SATA HDD		
	Hard disk trays (bays)	6 pcs		
	Storage capacity	6 x 10TB		
	RAID level	NA		
Display	Output	1 x VGA, 1x DVI-D, 1 x HDMI, 1 x DisplayPort		
	Multi-displays	2 x HD displays or 1 x HD + 1 x 4K displays		
	Local display resolution	4096 x 2304 Applied		
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		
Vetwork	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	Certification	CE, FCC, EN50130		
	Dimensions (W)x(H)x(D)	429 x 87.1 x 540 mm		
	Net weight w/o HDD	12 kg		
Software				
	ID semera licence			
Video recording	IP camera license (cam channels / LPR channels)	24/04	24/08	16/04
	Recording rate	Max. 192Mbps		
	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, AAC		
	Streaming type	Unicast & multicast		
Video display &	Local display (AVS enabled)	700fps@D1, 400fps@Full HD		
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 2.6+, 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	d), 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	License Plate Recognition, 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, sy	ystem crash, abnormal transaction from Po	OS, E-Fence, video motion detectio
		people counting		
	Reaction	User-definable text message, video patte	ern popup, e-mail, output alarm signal, trig	ger recording, PTZ preset
	Setup	A Rule Wizard for flexible setup		
Alarm	Trigger source		ystem crash, abnormal transaction from Po	OS, E-Fence, video motion detection
	Populion	people counting  User-definable text message video pattern popula e-mail output alarm signal trigger recording PTZ preset		
	Reaction	User-definable text message, video pattern popup, e-mail, output alarm signal, trigger recording, PTZ preset		
	Setup I/O modulo	A Rule Wizard for flexible setup  48 x inputs: 48 x outputs		
Pomete	I/O module	48 x inputs; 48 x outputs  IF 9 0 10 0 11 0		
Remote access clients	Web client	IE 9.0, 10.0, 11.0		
	APP client	iOS 10 and above; Android 5.0 and above  VMS(E4200), CMS(SW-E2200-CW03), CMS Lite (E90-Window 8 & 10)		
	PC thin client		SING LITE (E30-WITIGON 0 & TU)	
POS	Number of clients	5 8 unite		
	License	8 units		
	Integration (data) view	Integrable with all brands via POS filters  Patternations with both transaction data and relevant videos.		
	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  Alarm setup by item or value; supporting popup alarm, email alarm, text message alarm, etc.		
2	POS alarm		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, et		
	Languages	20+ languages are supported, including	English, Spanish, French, Dutch, Italian, J	apanese, Chinese, etc.

#### \* All specs are subject to change without notice.

## **Dimensions**

