

GV-TXVL1610



Introduction

GV-TXVL1610 is a powerful, compact HD DVR supporting both H.264 and H.265 compression. It accommodates up to 16 analog camera channels and 8 IP camera channels, allowing a total of 24 video inputs. The DVR converts analog signals into high-resolution digital images of up to 8 megapixels. With 4-in-1 video input, it supports TVI, AHD, CVI, and CVBS signal types.

In addition to high-quality recording, GV-TXVL1610 features advanced AI functions, such as face detection, smart intrusion detection, and people and vehicle motion detection. When integrated with AI-capable GV-IP cameras, it enables a broad range of analytics, ideal for comprehensive perimeter protection and surveillance intelligence.

Features

- 16-ch TVI / AHD / CVI / CVBS video inputs
- 8-ch IP camera inputs
- VGA and HDMI simultaneous output, up to 4K (3840 x 2160)
- 1 SATA interface, up to 16 TB
- Audio over coaxial cable support (only for TVI cameras)
- 4 alarms inputs and 1 alarm output
- Realtime face detection
- People and vehicle detection
- Analytics by cameras supported
- Smart device access (iOS and Android)
- ONVIF cameras supported
- GV-VPN supported
- 12 languages supported

Specifications

System		
Operating system		Embedded Linux
No. of Drive Bay		1 (3.5" SATA HDD), up to 16 TB
Video		
Video Compression		H.265 / H.264
Video Input	Analog camera	16 channels (up to 24 channels for analog cameras and IP cameras)
	IP Camera	8 channels (up to 24 channels for IP cameras only)
Signal Type		TVI / AHD / CVI / CVBS

Decoding		
Recording		Main Stream 8 MP-Lite at 8 fps for each channel Sub Stream D1 at 8 fps for each channel Main Stream 5 MP-Lite at 12 fps for each channel Sub Stream D1 at 12 fps for each channel Main Stream 4 MP-Lite at 15 fps for each channel Sub Stream D1 at 15 fps for each channel Main Stream 1080P at 15 fps for each channel Sub Stream D1 at 12 fps for each channel Main Stream 720P at 30 fps for each channel Sub Stream D1 at 12 fps for each channel
Live / Playback	Analog Camera	8 MP-Lite: 128 fps in total (8 fps/CH) 5 MP-Lite: 192 fps in total (12 fps/CH) 4 MP-Lite: 240 fps in total (15 fps/CH) 1080P: 240 fps in total (15 fps/CH) 720P: 480 fps in total (30 fps/CH)
	IP Camera	8MP: 60 fps in total (2 CH max.) 5MP: 90 fps in total (3 CH max.) 4MP: 120 fps in total (4 CH max.) 1080P: 240 fps in total (8 CH max.) 720P: 480 fps in total (16 CH max.) D1: 720 fps in total (24 CH max.)
Playback		Max. 16 channels
Audio		
Compression		G.711A, G.711U
Audio Support for IP Cameras		16 CHs, two-way audio
Audio over Coaxial		16 CHs, one-way audio (only for TVI cameras)
Audio over RCA		1 CH, one-way audio (only for CH No. 1)
Operation		
Max. Bandwidth	Input	80 Mbps *Up to 112 Mbps after all analog channel conversion
	Output *	160 Mbps
Event Management	Trigger	Schedule, Sensor Input, Alarm Output, Motion Detection
	Action	-Store Video (MP4 format) -Send e-mails with captured images -Upload captured images to FTP Server -Activate relay outputs to control external devices
Remote Monitoring		IE 10 / 11 Firefox V52 or later Google Chrome V45 or later Edge V79 or later
Language		Czech, English, French, German, Hungarian, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Traditional Chinese
Maintenance		Firmware upgrade through Web Browser or GV-IP Device Utility (V9.0.5 or later)
Network		
Protocol		802.1X, DHCP, NTP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, RTSP, IPv4/IPv6
Interface		
Video Input		16 BNC ports
Audio		1 in / 1 out, RCA

Alarm Input / Output		4 in / 1 out
RS-485		1, RS-485 +/-
Ethernet		RJ-45, 10/100/1000 Mbps
USB		2 ports (USB 2.0 rear, USB 3.0 rear)
Monitor	VGA	1 port 60 Hz: 1024 x 768, 1280 x 720, 1280 x 1024, 1600 x 1200, 1920 x 1080 50 Hz: 1920 x 1080
	HDMI	1 port 60 Hz: 1024 x 768, 1280 x 720, 1280 x 1024, 1600 x 1200, 1920 x 1080 50 Hz: 1920 x 1080 30 Hz: 3840 x 2160 (4K)
LED Indicator		3 LEDs: RUN, NET, HD
General		
Operating Temperature		-10°C ~ +55°C (14°F ~ 131°F)
Humidity		0 ~ 90% RH
Dimensions (L x W x H)		260 x 240 x 45.8 mm (10.2" x 9.5" x 1.8")
Weight		1.1 kg (2.42 lb)
Rack Mount		Yes
Power	Input	AC 100 ~ 240V, 50 ~ 60 Hz
	Output	DC 12 V, 3.0 A
Power Consumption		15 W (excluding HDD)
Certification		CE, FCC, LVD, RoHS, UL compliant
AI Integrated Function		
AI Analytics	AI by IP Camera	- Face Detection: max. 2 CH - Smart Intrusion Protection (Cross Line Detection, Intrusion Detection, Enter Area, Leave Area): max. 4 CHs - Auto Tracking * These functions are only applicable when the DVR is connected to AI-capable IP cameras, as listed in the <i>Compatible AI-Capable GV-IP Cameras</i> section below
	AI for Analog Camera by XVL	- Face Detection: max. 2 CHs - Smart Intrusion Protection (Cross Line Detection, Intrusion Detection, Enter Area, Leave Area): max. 4 CHs - Ultra Motion Detection: max. 16 CHs * Only one of these functions (Face Detection, Smart Intrusion Protection, and Ultra Motion Detection) can be enabled at a time * Only one analyzer setup (<i>Camera-Side Analysis</i> or <i>NVR (DVR)-Side Analysis</i>) can be enabled at a time.
Remote Monitoring		
Access from Web Browser		Live View, Image Snapshot, Playback, Digital PTZ, System Configurations
Applications		
Software Support		- GV-Control Center (V4.2.1, Patch required; coming soon) - GV-Edge Recording Manager Windows Version (V2.3.1, Patch required; coming soon) - GV-Recording Server (V2.1.1, Patch required; coming soon) - GV-VMS (V18.3.5, Patch required, V17.4.8, Patch required; coming soon) - GV-VPN (V1.1.2 or later)
		* An HD DVR license is required for connecting the HD DVR to the following systems (only analog channels supported): • GV-Recording Server V2.1.1 with Patch or later • GV-VMS V18.3.5 / V17.4.8 with Patch or later

Mobile Phone Support

GV-Eye for iOS and Android (V3.4.2; coming soon)

Note:

1. Fisheye dewarping is not supported.
2. GV-TXVL1610 does not support the thermal camera GV-TMEB5800.
1. Certain GV-IP cameras are not supported by GV-TXVL1610. See the [technical notice](#) for details.
2. GV-TXVL1610-P may support third-party IP cameras for motion recording, depending on the IP cameras' ONVIF capabilities.
3. The maximum remote connection is subject to the total output bandwidth. See the maximum output bandwidth column for the specification. *
4. For system efficiency, it is recommended to use enterprise-level hard disk drives. For the supported hard disk drive, see [GV-SNVR HDD Compatibility Table](#).
5. Specifications are subject to change without notice.

Compatible AI Capable GV-IP Cameras

- GV-BLFC5800, EBD4813, EBFC5800, TBL4810, TDR4803, TFD4800, TVD4810: Firmware V1.04 or later
- GV-EBD8813, EBD8800, TBL8804, TBL8810, TDR8805, TVD8810: Firmware V1.05 or later
- GV-SD4825-IR, SD4834-IR: Firmware V1.02 or later
- GV-PTZ5810-IR: Firmware V1.01 or later
- GV-TBL4807, TVD4810: Firmware V1.06 or later

Packing List

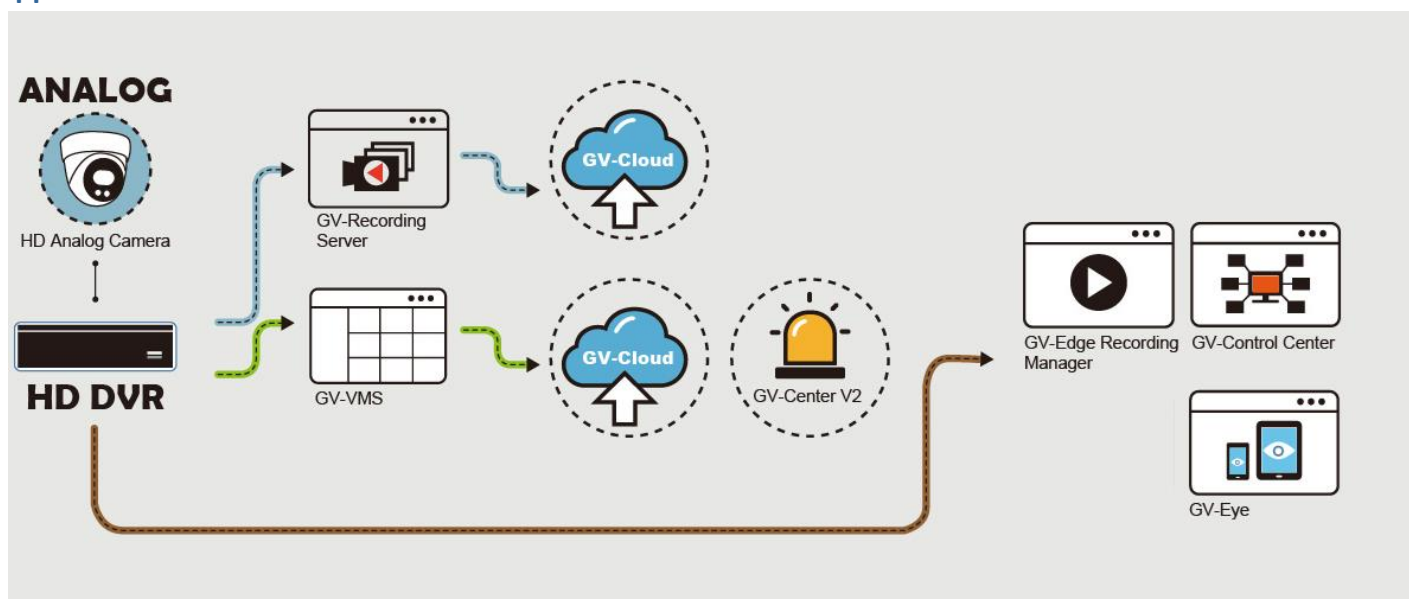
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|------------------------|--|
| 1. GV-TXVL1610 | 6. Power cord |
| 2. SATA cable | 7. Power adapter (DC 12V, 3A) |
| 3. HDD power cable | 8. Rack mount kit (2 L-shaped brackets + 4 screws) |
| 4. Screw Kit (for HDD) | 9. Download Guide |
| 5. USB Mouse | |

Accessory

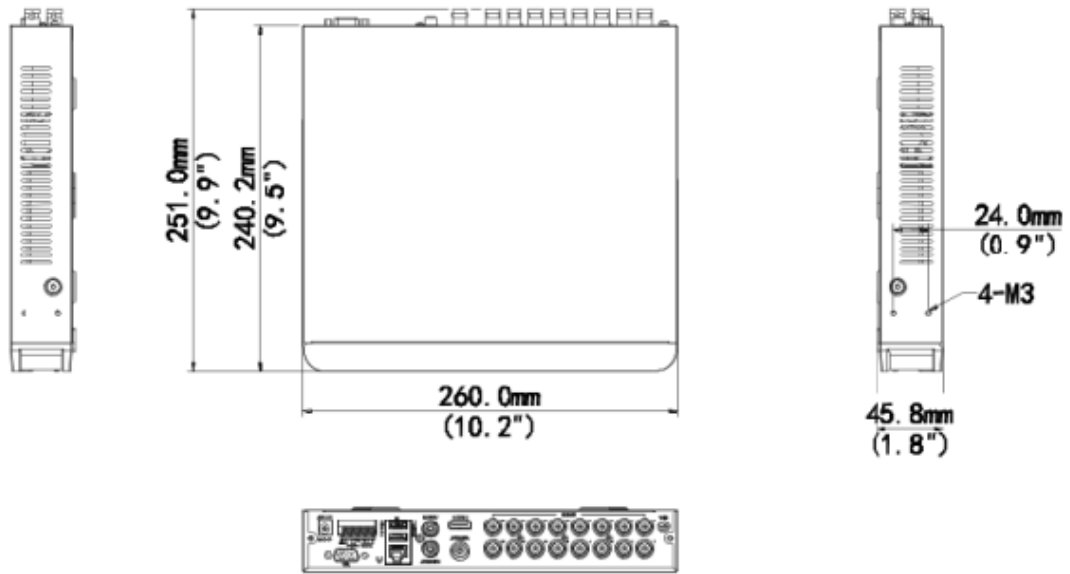
[GV-POE Switch](#)

GV-POE Switch is designed to provide power along with network connection for IP devices. It is available in various models with different numbers and types of ports.

Applications



Dimensions



Rear Panel

