



## TITANUS RAID VMS System – 3U/4U, 16/24-Hot Swap Bay

### INTRODUCTION

The TITANUS embedded Hot Swap VMS System is designed base on Intel® embedded platform equipped with Intel® Core™ i7 / i9 processors with pre-loaded Intelligent Surveillance application. The TITANUS Hot Swap VMS System features a powerful data storage capacity. It comes with a selection of 3U /4U (16 or 24-Bay) and hot-swappable SATA mobile racks. Depending on HDD size, the TITANUS RAID Hot Swap VMS System can store up to 336 terabytes of recorded data. Support for hot-swapping makes data storage and management more convenient. The built-in SAS connection allow the storage expansion with additional JBOD storage. The live view and playback layout can be easily adjusted with the intuitive drag-and-drop function. TITANUS VMS comes with a variety of intelligent video analytics to offer precise monitoring and to reduce the need for manual supervision. TITANUS embedded Hot Swap VMS System support Intel vPro® powered Intel® Active Management Technology, to provides persistent out-of-band connectivity that operates independently of the OS, allowing fixes to a wider range of systems issues. It is useful to user who prefer remote access troubleshooting the server.

The TITANUS Intelligent Surveillance System empowers the TITANUS RAID VMS System with a maximum of 64 video and audio channels. Its networking capability makes remote access and control of the system possible. Additionally, its compatibility with other GeoVision accessories can cater to any kind of needs or budgets.

### KEY FEATURES

- ▶ Powered by Intel® Core™ i7 / Core™ i9 processors
- ▶ Solid State Drive for OS
- ▶ 64-bit Embedded Windows 10 / 11 IoT
- ▶ Support up to 64-channel GV-VMS
- ▶ Maximum storage capacity of up to 336 terabytes in RAID 5/6 redundant storage system
- ▶ Hot-swap status LED panel
- ▶ 3U / 4U (16 / 24-bay) hot-swap SATA HDDs for data storage
- ▶ 1+1redundant power supply
- ▶ Built-in internal redundant cooling ventilation fan
- ▶ Built-in Intel® Active Management Technology (Intel vPro®)
- ▶ Extreme performance for GV-NVR / GV-VMS operation
- ▶ Compatible with full selections of GeoVision accessories

## SPECIFICATIONS

System		TITANUS RAID RX-16	TITANUS RAID RX-24
Model			
CPU		Intel® Core™ i7/ i9 processors	Intel® Core™ i7/ i9 processors
RAM		16GB/ 32GB	16GB/ 32GB
HDD Bay		16	24
OS		64-bit Windows 10 IoT	
Connector	Ethernet	RJ-45, 10 / 100 / 1000 Mbps x 2	
	VGA Output	DB-15 VGA Monitor Output, DVI-D Output (DVI-D signal Only), or HDMI Output	
	USB	Front: 1 port, Rear: 4 ports	
Fan		Rear: 2 units, Redundant: 3 units	
Power		700W 1+1 Redundant	1200W 1+1 Redundant

Video and Audio	
Video Input	Max 64 channels
Audio Input	Max 64 channels

Live View Playback	
Image Control	Contrast / Brightness / Saturation / Hue
Recording Mode	Round the Clock / Motion Detection / Sensor Detection / Pre & Post Recording / Schedule Recording
Instant Playback	10 sec. / 30 sec. / 1 min. / 5 min.

Searching and Backup	
Search Method	Date / Time / Camera / Event Type
Backup Type	USB, e-SATA, NAS, Blu-ray, DVD+R (DL) / DVD-R (DL) / DVD+R / DVD+RW / DVD-R / DVD-RW

Remote Monitoring	
Network Type	LAN, WAN, Internet
Monitoring Environment	Web browser (IE, Chrome, Firefox and Safari) GV-EDGE recording (Windows, Mac) Mobile device (Android Smartphone and tablet; iPad, iPhone and iPod Touch)
Remote Live View	Max. 64-channel multi views (Max. 200 channels connection to TITANUS VMS RAID)

System Monitoring and Recovery	
Power Restoration	Automatic restart after power outage
Monitoring	Two independent Watchdogs (Hardware Watchdog + Software Watchdog)
Recovery	Automatic system rebuilds from USB drive

Alarm		
Sensor Input	Standard (Optional)	4 inputs
	GV-IO 12-In Card (Optional)	12 inputs
	GV-IO Box (Optional)	4 / 8 / 16 inputs
Alarm Output	Standard (Optional)	4 outputs
	GV-IO 12-Out Card (Optional)	12 outputs
	GV-IO Box (Optional)	4 / 8 / 16 outputs

Environment		
Operating Temp.	0 ~ 45 °C / 32 ~ 113 °F	
Humidity	0 ~ 80% RH (non-condensing)	
Language		
Type	Bulgarian / Czech / Danish / English / French / German / Greek / Hebrew / Hungarian / Italian / Japanese / Persian / Polish / Portuguese / Russian / Serbian / Simplified Chinese / Slovakian / Slovenian / Spanish / Traditional Chinese / Turkish	
Physical		
LED Indicator	Yes (Fan, Power, HDD)	
Color	Silver, Black + Navy Blue(Front Panel)	
Dimensions (W x H x D)	590 x 850 x 335 mm / 23 x 34 x 13 inches	616 x 921 x 313 mm / 24 x 36 x 16 inches

**Note:** All specifications are subject to change without notice.

## Monitoring

- Support for 64 channels in GV-VMS and CMS applications
- Support for H.264, H.265 GPU decoding and GPU fisheye dewarping
- Software license management
- Customizable layout for live view and playback with drag-and-drop support
- Multi-monitor display to show live view and playback on different monitors
- Support for QView display which enables the projection of a live view display onto another monitor
- Support for Microsoft SQL and Access database type
- Support for over 500 GeoVision and 3rd party IP camera models
- Auto search for IP cameras within the LAN
- Support for H.264, H.265, and MJPEG codec
- Support for resolution from CIF to megapixels
- Smart Dual Streaming for monitoring and recording
- Support for smart streaming of GV-IP cameras
- Panel resolution up to 4K
- Noise Tolerance for motion detection
- 3D E-map
- System log
- Support for up to 1,000 accounts for login
- Multi-level passwords protection and password expiration management
- Automatic login with GV-PCR310 Enrolment Reader
- I/O devices control
- PTZ control panel and PTZ auto functions
- System Idle Protection
- Live view buffer and frame rate control
- Live View Object Index to show the objects or faces captured
- Dual stream on-demand display
- Fisheye dewarping for GeoVision and 3rd party fisheye cameras
- Support for GV-Live Streaming for streaming from Android / iOS mobile device cameras
- Support for ONVIF cameras; PSIA and RTSP protocols
- Realtime color-coded face recognition events from GV-Face Recognition Camera and GV-AI FR (V18.1 or later only)

### Intelligent Recording, Smart Search and Easy Playback

- Continuous recording (round-the-clock) and recording triggered by motion detection, alarm and schedule
- Adjustable recording quality and frame rate for each camera
- Pre-motion/I/O and post-motion/I/O recording
- Storyline recording
- Timeline Search
- Object search
- Thumbnail browse to quickly search for specific frames within video footage
- Instant Playback
- Extracting frames from a video clip during playback
- Support for Daylight Saving Time (DST)
- Support for recording in standard H.264, H.265, and MJPEG codec
- Support for configuration change without stopping recording
- Continuous playback of set frames A to B
- AVI repair utility

### Video Merging and Export

- Exporting video recording within a specified time range
- Exporting videos in EXE format, playable with any third-party players
- Exporting videos of multiple channels in a single AVI video
- Support for automatically assigning storages to multiple camera channels
- Support for Windows burning software
- Time Merge function for exporting a full-length video with recorded and non-recorded periods
- Support for saving dewarped fisheye view in AVI format

### Notification

- E-mail notification with attached video images upon specified alert conditions
- Camera popup upon motion or I/O trigger
- Computer alarm upon recording errors, input, motion and other alarm conditions
- Video lost detection and notification through on-screen message
- Face event alarms & alerts via I/O devices, computer alarms, emails, G-Notify app and executing programs on the PC (V18.1 or later only)

### Video Analytics

- Object Index
- Privacy Mask
- Defog
- Stabilizer
- Intrusion Alarm
- Counter
- Crowd Detection
- Advanced Unattended Object
- Advanced Scene Change
- Advanced Missing Object
- Face Count
- Face Detection by Software
- Heat Map
- Face Detection by GV-Face Detection Camera (Please contact our sales for further information)
- Face Recognition by GV-Face Recognition Camera and GV - AI FR (V18.1 or later only)
- Face Search by face snapshots & photos, age, gender, name, face group and alert type (V18.1 or later only)

### Utilities

- Dynamic DNS
- Digital watermark
- Windows lockup
- Fast backup and restore (FBR)
- Bandwidth Control program
- Point of Sale (POS) integration
- Local backup and remote backup with GV - Backup Center
- Report Generator

### Remote Surveillance

- SSL Encrypt Connection Support
- UPnP™ Support
- Control Panel on Single View to provide instant information and operation
- Support for PIP, Focus View, Defogging Live Videos, and Video Stabilizer in Single View
- Restricting Power User and User to access WebCam Server at specified time length
- Event List Query
- Download Center
- Remote E-Map with pop-up live images upon input trigger

### IT Technology

- RSA Network Security
- Authentication Server: centralized control of password settings in multiple GV - VMS with support for Windows Active Directory