



4.3.X NETWORK VIDEO RECORDER

RELIABLE | INTELLIGENT | CERTIFIED **Product Overview**

VICADS® NVR hardware design centers on and delivers maximum performance, uptime and reliability. The system is designed to meet 24/7/365 operational requirements for the most demanding and mission critical applications. The system is highly configurable and simultaneously supports many cameras, resolutions, frame rates, encoding protocols, events and fault tolerance needs. Recorders can be centralized or distributed across the video network, they can be single stacks or fully redundant for the highest reliability.

Every VICADS® NVR edis highly configurable to match the fault tolerance and storage requirements of each unique application. The system is performance built with an enterprise front end recording array designed to handle a constant input load from field devices while simultaneously delivering high quality on demand video to clients.

Features	Benefits
Sturdy, Scalable, Serviceable	Designed for high reliability minimal downtime applications, expansion without obsolescence.
Redundancy and Regionalization	Fully redundant hardware configurations for mission critical applications.
Intelligent Event Integration	Integrated with multiple event input sources to deliver an automated video switching & display matrix.
User Configurable Performance Design	System built to deliver high throughput constant input and output loads..
Information Assurance Posture	DoD Risk Management Framework (RMF) Compliant.
Advanced Video Analytics Integration	Video realm intelligence can be fully integrated into a common operator picture.

HARDWARE SPECIFICATIONS

SPECIFICATION	DESCRIPTION	NOTES
Operating System	Microsoft® Windows Server 2022	64 Bit, Member Server
RAID Controller	RAID P816i-a w/ Smart Storage Battery	RAID 0,1,5,6
Storage Details	2- 960GB SATA SSD Drives 4- 1.2 TB SAS Enterprise Drives 10- 3.5" Hot Swap Drive Bays	Configured as RAID 1 for O/S Configured as RAID 10 for Enterprise Performance Front End Configured optional as RAID 5 or RAID 6 for Value Driven Back End
Capacity	Maximum 122TB per 2U unit	Storage space, fault tolerance and spare configuration customer specified
Storage Application Examples (Single Unit, 120TB)	~90 days per channel ~60 days per channel ~30 days per channel ~90 days per channel ~60 days per channel ~30 days per channel	24/7 recording @ max # of supported channels, 720P HD resolution and 7 FPS 24/7 recording @ max # of supported channels, 720P HD resolution and 15 FPS 24/7 recording @ max # of supported channels, 720P HD resolution and 30 FPS 24/7 recording @ max # of supported channels, 1080P Full HD resolution and 7 FPS 24/7 recording @ max # of supported channels, 1080P Full HD resolution and 15 FPS 24/7 recording @ max # of supported channels, 1080P Full HD resolution and 30 FPS
Memory	2- 16GB PC4-2666V	32GB RAM
Processor	2- Intel Xeon Silver 4110 Processor	Dual Processors, 8C/16T
Network	4- 1Gb network interfaces	RJ-45
Power Supply	2- 500W Power Supply	Redundant
Power Consumption	Max: 4A @ 120VAC / 2A @ 240VAC	Per Supply
Peripherals	2- 1.83 m (6') 10A US	U.S. Power Cords
Warranty	3 year standard, 5 year optional	Limited
Hardware Part Numbers	10-10000-003 10-37001-001 10-38001-001	VICADS® Network Video Recorder 2022 HP VICADS Network Video Recorder 2022 HP Spares Kit VICADS® (MGMT, VBS, NVR) 5-yr Warranty HP
Software Part Numbers	10-30000-0SL 10-30000-ORL	VICADS® Network Video Recorder Site License, V4 VICADS® View & Record License (per camera), V4

PERFORMANCE SPECIFICATIONS

SPECIFICATION	DESCRIPTION
# of Recording Servers	Unlimited; Single sided or redundant with concurrent or non-concurrent redundancy supported
# of Cameras ¹	Unlimited in system; 50 IP sources @ 720P or 25 IP sources @ 1080P per 2U recorder
# of Users	Unlimited
Frame Rates	Up to 60FPS, variable frame rates per channel supported
Active Directory Integration	Yes
Configuration Interface & Database	Client Software Based & MSSQL Express
Supported Encoding Protocols	MJPEG, MPEG4 and H.264 formats supported
Devices Supported	Over 1000 IP cameras, encoders from over 100 manufacturers
Video Analytics Options	Video Motion Detection standard, other options available
Certifications & Approvals	DoD Approved for PL1N and PL1-PL4, DIACAP compliant

ENVIRONMENTAL SPECIFICATIONS

NOMENCLATURE	TEMPERATURE HUMIDITY & ALTITUDE (NON-OPERATING) ²	TEMPERATURE & HUMIDITY & ALTITUDE (OPERATING) ²	ESTIMATE BTU LOAD (PER SERVER) ³
VICADS Network Video Recorder 2022 HP	-30°C to 60°C (-22°F to 140°F) 5-95% (non-condensing) 9144 m (30,000 ft)	10°C to 35°C (41°F to 95°F) 8-90% (non-condensing) 3050 m (10,000 ft)	1799 BTU/hr (maximum)

DIMENSIONAL SPECIFICATIONS

NOMENCLATURE	HEIGHT (H)	WIDTH (W)	DEPTH (D)	CLEARANCE (REAR) ⁵	WEIGHT ⁶
VICADS® Network Video Recorder 2022 HP	3.44"	17.54"	28.75"	4"	24.5kg (54lbs)

¹ These are recommended capacities. Resolution higher than 1080P, frame rates greater than 30 and counts greater than 25/50 are not limited by software but affect hardware density. Contact factory for details.

² Altitude deratings against operating temperature are 1.0°C per 305m (1.8°F per 1000ft). Extended temperatures can be achieved in specific configurations. Contact factory for details.

³ Heat dissipation (BTU/hr) data is based on 120VAC power input and is provided as an estimate for reference only.

⁴ Allow an additional 1 RU (1.75") Air Gap between each racked component.

⁵ Clearance is a recommended space budget in addition to machine dimensions to allow for cables & routing.

⁶ Exact weight depends upon configuration.

[†] Specifications are subject to change without notice. PSG is not responsible for customer use of this data.

