

V600

16 BAY · 3U RACK · V5 VIDEO SERVER

NDAA

CE / UKCA

FCC / UL / RCM

THROUGHPUT
3,000 Mbit/s

MAX STORAGE
384 TB

DRIVE BAYS
16

MAX CAMERA STREAMS
275

RECOMMENDED USAGE

Tailored for mid to large-sized deployments with growing camera counts and retention needs, this solution prioritizes security and high performance. It offers robust video protection combined with expanded storage capacity, to meet the demands of evolving surveillance environments and extended retention times

KEY ATTRIBUTES

- Windows Server 2022 or 2025 LTSC
- 32GB ECC DDR5 RAM
- RAID 6 data protection
- N+1 hot-swap power & cooling
- AMD EPYC 9005 CPU
- Mirrored, hot-swap OS SSDs
- Quad 10Gb Ethernet
- TCG 2.0 cybersecurity w/ TPM



5-Year NBD Advanced Parts Warranty

Advanced Warranty with NBD Advanced Parts Replacement of Field Replaceable Units (FRUs). Secure remote management & advanced support delivers rapid response & uptime.

VIDEOX ENTERPRISE FEATURES

- Lower deployment costs — hardware accelerated H.265**
V5 micro-architecture acceleration delivers up to 2.3× H.265 stream processing per server, and 30–50% storage and bandwidth savings per server versus H.264 — fewer servers, higher camera density, longer retention, same budget.

- High data availability**
RAID 6/60 redundancy tolerates up to 6 hard drive failures depending on model and configuration, with hardware XOR, CacheVault protection and patrol read repairs.

- Flexible & scalable tier-1 enterprise storage**
Scale to petabytes of tier-1 capacity and tailor retention per project. Enterprise-class HDDs and SSDs throughout, for tier-1 availability and performance.

- Strengthen cybersecurity**
A built-in TPM 2.0 module supports hardware Root of Trust authentication and data encryption. All VideoX are fully NDAA compliant.

VALIDATED
WITH

Milestone

Genetec

Avigilon

Hanwha WAVE

NX Witness

Exacq

WHERE THE V600 SITS IN THE VIDEOX NVR LINE

Drive bays · max camera streams

V100 2 bay · 1U 25	V200 4 bay · 1U 100	V400 8 bay · 2U 200	V500 12 bay · 2U 275	V600 16 bay · 3U 275	V700 24 bay · 4U 325	V800 36 bay · 4U 325
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MAXIMUM VIDEO STREAM RATE

3,000 Mbit/s · 384 TB raw · 336 TB usable

RESOLUTION	CODEC	CAMERA STREAMS	VS. 4MP BASELINE
4MP · 2560×1440 (16:9)	H.265-20	275	Baseline VSR
8MP · 3840×2160	H.265-20	151	~45% — 2× the pixels per frame

VSR PARAMETERS	RESOLUTION 4MP · 2560×1440	FRAME RATE 15 fps	CODEC H.265-20 (Good) · ~3.2 Mbit/s
RECORDING On motion, VMD + metadata	MOTION ACTIVITY 75% average per day	RETENTION 30 days	

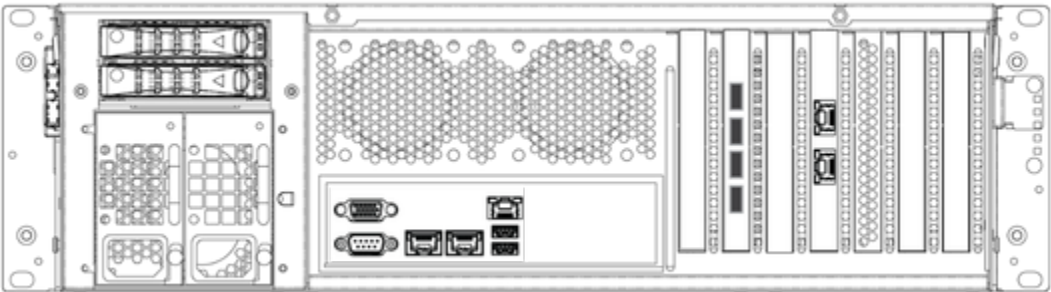
Max VSR is camera streams, not cameras — a multisensor device presents several streams. If a recording parameter changes, revise the calculation. Validated for Avigilon, Milestone, Hanwha/NXWitness and Genetec; other platforms vary.

ORDERABLE CONFIGURATIONS

PART NUMBER	DRIVE CONFIGURATION	RAW	USABLE · RAID 6
VX5-V600-256	16 × 16TB enterprise HDD	256 TB	224 TB
VX5-V600-320	16 × 20TB enterprise HDD	320 TB	280 TB
VX5-V600-384	16 × 24TB enterprise HDD	384 TB	336 TB

Three drive capacities per NVR — same chassis and performance, different retention. Usable capacity is RAID 6, excluding the mirrored OS SSD pair.

REAR I/O PANEL



GENERAL INFORMATION

Systems ship with Microsoft Windows pre-installed without media and not set up; the installer is responsible for setup, VMS installation, and configuration of users, cameras and databases. VMS installers are included but not installed. Milestone and Avigilon best practice is SQL Standard above 300 cameras — optional, not included. Client View application on server is not supported; a dedicated Client View workstation is required.

HARDWARE INFORMATION

CPU	AMD EPYC 9005 3.3Ghz 16/32 Core, 16C/32T, 3.3 Ghz, 64MB cache
Acceleration	Chiplet microarchitecture · AMD Infinity Architecture & Guard · Native 512-bit data paths (AVX-512) · 614 GB/s memory bandwidth
RAM	32GB ECC DDR5
Operating system	Windows Server 2022 or 2025 LTSC
VMS / OS drive	2x Enterprise SSD, Mirrored, hot-swap, dedicated for OS/VMS
Hard drives	Up to 16x enterprise class 7200 RPM 3.5" HDD, 2.5 Million hour MTBF, certified 24/7, tool-less hot-swap
Storage capacity	Up to 384TB raw capacity
RAID	RAID 0/1/5/6/10 · CacheVault battery protection
Network	4 × 10GbE + 1 IPMI · Optional -2x 10Gb SFP+ or 2x 25Gb SFP28 upgrade available
Display	VGA (Client View applications not supported on server)
Encryption	AMD Secure Encrypted Virtualization (SEV) · AMD Secure Memory Encryption (SME) · Cryptographically signed firmware · Data at Rest Encryption (SEDs with local or external key mgmt) · Secure Boot · Secured Component Verification (Hardware integrity check) · Secure Erase · Silicon Root of Trust · System Lockdown · TPM 2.0 FIPS, CC-TCG certified
Management	Dedicted Out of Band (OOB) Remote Management including: IPMI System Management, KVM Console Redirection

REGULATORY & ENVIRONMENTAL

Form factor	3U Rackmount
Power	800W · 1+1 redundant PSU PMBus 1.2 · @ 100-240V, 10-5A, 50-60Hz
Max draw	800W up to 80% efficient (Platinum) hot-plug redundant
Cooling	3x 80x38mm PWM & low-power consumption hot swap fans
Dimensions	680mm (depth) x 430mm (width) x 133mm (height) · 17 x 26.8 x 5.2
Weight	Ship Weight W/ 16x HDDs = 42k/90lbs
Operating temp	10- 30 C / 41 - 86 F
Storage temp	-40 - 65 C / -40 - 149 F
Humidity	10 – 90% relative humidity (non-condensing)
Safety	CE (class A), UKCA, FCC, RCM, UL
Trade	NDAA Compliant, no disclosures