

V700

24 BAY · 4U RACK · V5 VIDEO SERVER

NDA

CE / UKCA

FCC / UL / RCM

THROUGHPUT

4,000 Mbit/s

MAX STORAGE

576 TB

DRIVE BAYS

24

MAX CAMERA STREAMS

325

RECOMMENDED USAGE

This advanced video analytics platform delivers unmatched protection and security for large-scale deployments. It serves as the ideal foundation for complex surveillance projects, featuring fully optimized VMS analytics for intelligent monitoring at scale

KEY ATTRIBUTES

- Windows Server 2022 or 2025 LTSC
- 32GB ECC DDR5 RAM
- RAID 60 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 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 NDA compliant.

VALIDATED
WITH

Milestone

Genetec

Avigilon

Hanwha WAVE

NX Witness

Exacq

WHERE THE V700 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

4,000 Mbit/s · 576 TB raw · 480 TB usable

RESOLUTION	CODEC	CAMERA STREAMS	VS. 4MP BASELINE
4MP · 2560×1440 (16:9)	H.265-20	325	Baseline VSR
8MP · 3840×2160	H.265-20	179	~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	

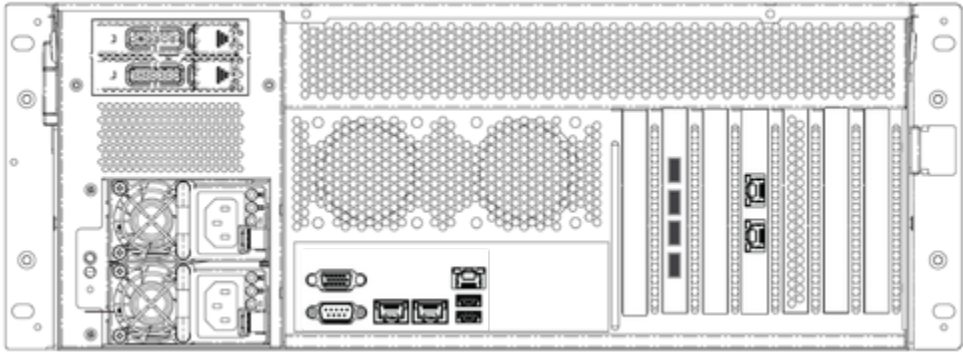
Max VSR is camera streams, not cameras — a multisensor device presents several streams. If a recording parameter changes, revise the calculation. Validated for Avigilon, Milestone, Hanwha/NXWitness and Genetec; other platforms vary.

ORDERABLE CONFIGURATIONS

PART NUMBER	DRIVE CONFIGURATION	RAW	USABLE · RAID 60
VX5-V700-384	24 × 16TB enterprise HDD	384 TB	320 TB
VX5-V700-480	24 × 20TB enterprise HDD	480 TB	400 TB
VX5-V700-576	24 × 24TB enterprise HDD	576 TB	480 TB

Three drive capacities per NVR — same chassis and performance, different retention. Usable capacity is RAID 60, 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 4.3Ghz 16/32 Core, 16C/32T, 4.25 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	Enterprise 3D TLC Flash SSD Dedicated for OS/VMS, Hot-swap
Hard drives	Up to 24× enterprise class 7200 RPM 3.5" HDD, 2.5 Million hour MTBF, certified 24/7, tool-less hot-swap
Storage capacity	Up to 576TB 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	Out of Band (OOB) Remote Management including: IPMI System Management, KVM Console Redirection

REGULATORY & ENVIRONMENTAL

Form factor	4U Rackmount
Power	1200W 1+1 redundant PSU PMBus 1.2 · 1+1 redundant · 100-127VAC 10A 50-60Hz, 800Watt 200-240VAC 8A, 50-60Hz, 1200Watt
Max draw	1200W up to 80% efficient (Platinum) hot-plug redundant
Cooling	6 x 80x38mm PWM & low-power consumption hot swap fans
Dimensions	430mm (w) x 680 (d) x 175 H · 16.9 x 26.8 x 6.9
Weight	Ship Weight W/ 24x HDDs = 72k/167lbs
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