



VAISENSE Rack Server

VS-R-64TB / VS-R-128TB

Turn Existing IP cameras into enterprise-grade AI platform-locally, securely, and at scale.

Note: Images are for reference only.

Up to **100**
IP Cameras

Advanced
RAID 0/1/5/6 Storage

High-Performance
AI Processing



Camera Support

Supports up to 100 IP cameras compatible with most ONVIF-compliant devices, with up to 4K resolution.



Local HDD Storage

Up to 64TB / 128TB of raw storage. Supports RAID 0/1/5/6 configurations for performance and redundancy.



On-Edge Device

Real-time AI inference powered by NVIDIA GPU, enabling people & face detection, vehicle & license plate recognition, occupancy analytics, smoke and fire detection, and weapons detection-all on the edge.



IoT & Peripheral Integration

Native support for USB, GPIO, PoE, and IP-based devices, including alarms, speakers, displays, and auxiliary sensors.



Industrial-Grade Design

Standard rack-mount form factored for data centers and IT server racks.



Security & Compliance

Built-in TPM 2.0 hardware security and NDAA-compliant architecture to meet enterprise and government requirements.

AI Analytics Capacity



People & Vehicle
Detection



LPR Detection



Line Crossing
Detection



Smoke & Fire
Detection



Face Recognition
Detection



Occupancy
Analytics



Loitering
Detection



Weapons
Detection



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Key Components & Features

TPM 2.0 Support	Supported
Operating System	Embedded Linux-based OS
CPU Model	Intel Core Ultra 9
Installed Memory	64GB DDR5
Maximum Memory	Up to 192GB (4 DIMM slots)
GPU	1 x NVIDIA RTX 5060
M.2 Slots	1 x M.2 PCIe 4.0 ×4 slot (M-key 2280/22110) 1 x M.2 PCIe 5.0 ×4 slot (M-key 2280)
PCI-Express (PCIe) Configuration	1 x PCIe 4.0 ×4 slot 2 x PCIe 5.0 ×16 slots 1 x PCIe 4.0 ×8 SlimSAS slot
Drive Bays	8 × 3.5" Hot-swap SAS/SATA
Front I/O Interfaces	1 x USB 3.2 Gen2×2 port(s)
Ethernet	1 × 1GbE RJ45 1 × 2.5GbE RJ45
USB	3 x USB 3.2 Gen2 Type-A port(s) 1 x USB 3.2 Gen2×2 Type-C port(s) 1 x USB 4 Type-C port(s)
Thunderbolt	1 x Thunderbolt™ 4 Type-C port(Rear)
Video	1 x Display Port 1 x HDMI 2.1 (8K@60Hz)
Audio	1 x Audio Line-out 1 x Audio Line-in
Power Supply	1000W Dual redundant PSU
Form Factor	2U Rackmount
Dimension (H x W x D)	89 × 437 × 647 mm 3.5 × 17.2 × 25.5 in
Operating Temperature	5–35 °C
Certification	CE/FCC/UL
Standard Warranty	3 Years
Extended Warranty Option	Available
Accessories	rail bracket

Models

	VS-R-64TB	VS-R-128TB
Number of Camera	Up to 50 cameras	Up to 100 cameras
Camera Capacity Suggestion	4MP@15fps	4MP@15fps
Video Codec Capacity	Supports both H.264 and H.265	Supports both H.264 and H.265
Total Storage Capacity	64TB	128TB
Storage Architecture & Retention Policy	RAID-configurable storage architecture. RAID-configurable storage architecture.	