URSUS AI VIDEO SERVER

Specification Sheet

>280 Teraflops of performance & scalability for hi-density video

The Ursus AI Video Server is available in both tower configuration (left) and 4u blade configuration (right). Both are designed to optimize video workloads at AI cloud data center density.

Innovate at scale with challenging video workloads

The Urus AI Video Server is powered by two of NVIDIA's most powerful processors, using the Ursus proprietary parallel-processing configuration, with control functions managed by either a single 6th generation 32 core AMD processor, or two 12th generation Intel 10 core processors. (Newest gen chips may also be installed if chosen) Both configurations are optimized for extreme AI video applications. The Ursus 2.0 Video Server in rack configuration is a 4U server that delivers outstanding performance for the most demanding video workloads. It supports quad channel memory, and up to 64 DDR4 DIMMs @ 3200 MT/s speeds. In addition, to address substantial throughput improvements, the Ursus 2.0 Video Server supports up to four Gen 4 PCI-E x16 slots, 7 M.2 drives, and 6 SATA drives with improved air-cooling features and optional Direct Liquid Cooling in the tower configuration to support increasing power loads, and extreme thermal requirements. This makes the Ursus 2.0 an ideal server for multiple simultaneous video channels. The dual GPU configuration supports up to 12 simultaneous 4K displays, or equivalent workloads, including supercomputing analytics and database management, high frequency trading, block-chain infrastructure management and High Performance Computing (HPU). HPU applications include machine learning and artificial intelligence environments that require both performance and multi-channel GPU support, available in both a dense 4U form factor, or a liquid cooled tower form.

Increase efficiency and accelerate operations with autonomous collaboration

The Ursus video management software simplifies and secures 3-D graphical AI infrastructure. Using Maxx Technologies' end-to-end video tools, the Ursus 2,0 can deliver a secure, integrated experience by reducing process and information silo interoperability in order to optimize complex video content. The Maxx video software management portfolio is key to your innovation engine, unlocking the controls and automation you need to scale, manage, and secure your video or 3D graphics environment.

- Built-in parallel video streaming and requisite heat dissipation management, relying on an Ubuntu rich environment.
- Intuitive automation invites cooperation between human input and system capabilities, in order to scale up video production and delivery.
- Integrated change management capabilities for update planning and seamless, zero-touch configuration and implementation
- Full-stack management integration with Microsoft, VMware, ServiceNow, Linux Moodle, and many other tools

Protect your data assets and infrastructure with proactive resilience

The Ursus AI video server is designed with a cyber-resilient architecture, integrating security deeply into every phase in the machine's lifecycle, from design to retirement.

- Operate in a secure environment anchored by cryptographically trusted booting, undergirded by a silicon root security platform.
- Video server firmware safety through regular firmware updates.
- Prevent unauthorized configuration changes, or firmware perversion with remote system lockdown.
- Securely and quickly wipe all data from storage media, with up to 112 terabytes of solid-state memory, with instantaneous system wide data erasure.

Ursus AI Video Server

The Ursus AI Video Server offers compelling performance, high- speed memory and capacity, I/O bandwidth and storage to address dense data requirements – Ideal for HPC:

- Video Dense AI Applications
- Machine Learning
- Blockchain Infrastructure
- AI Inference Processing

Feature	Options & Technical Specifications	
Processor	Either a single 6th generation 32 core AMD processor, or two 12th generation Intel 10 core processors Higher Generations can be added on instead of AMD6th or the 2 12th Intels.	
Memory	• Up to 8 channels • Up to 16 Slots • Up to 512 GB	
RAID	• RAID 0 • RAID 1 • RAID 10	
Drive Bays	• Up to 7 x Gen4 M.2 Slots • Up to 6 x SATA 6Gb/s	
Power Supplies	• 1200-Watt 80+ Platinum • 1500-Watt 80+ Titanium • 1600-Watt 80+ Titanium	
Cooling options	Air cooling, optional processor liquid cooling	
Fans	• Up to 8 ARGB 120mm fans	
Dimensions (Tower Configuration)	• Height – 612 mm (24.09 inches) • Width – 266 mm (10.47 inches) • Depth – 556 mm (31.85 inches)	
Form Factor	4U rack mount or E-ATX Tower configuration	
Wireless	• WIFI 6 AX200 • Bluetooth 5.0	
Embedded NIC	• 1 x Intel I211AT Gigabit • 1 x Aquantia AQC107 10-Gigabit	
Card Options	• SDI Capture Card (4 channel) • HDMI Capture Card (4 Port) • 4 Port PoE NIC	
GPU Options	Up to three dual width GPUs with four displays each (SLI compatible)	
Ports	Front Ports • USB 3.1 Gen2 Type-C • 2 x USB 3.0 • 1 x USB 2.0 • Mic x1 / Audio x1	Rear Ports • 1 x USB 3.1 Gen2x2 Type-C • 5 x USB Gen2 Type-A • 4 x USB Gen 1 Type-A • 2 x RJ-45
PCIe	Up to 3 x PCIe Gen4 low profile slots (all x16 except one x8 slot with SNAP I/O modules) or 2 x PCIe (Gen4) full height slots	
Operating Systems and Hypervisors	• Ubuntu Desktop and Server • Microsoft Windows 10 or 11 Pro • Microsoft Windows Server with Hyper-V • VMware	

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