High Performance Video Streaming Server

XOR FMS 5000

High Performance Flash Solid State Cache/CDN Edge Video Streaming Server

FMS 5000, released by XOR Media, is a cache streaming server with high capacity flash storage and high density streaming and ingesting capability. It takes advantage of intelligent caching mechanism to store hot video content and stream the ingested video content file to target clients. As a single-node storage and playback device for caching streaming media, FMS 5000 can be used to constitute an easily scalable server cluster to store and play video content with high performance and high security. FMS 5000 can be integrated with CDN (Content Delivery Network) system seamlessly, significantly reducing video server operation cost for interactive operators.

Operation cost abatement

- Reduce capital investment and operational cost associated with traditional disk damage.
- Intelligently cache hot video asset content.

Multi-format video file ingest and playback

- Support to ingest and play video assets which are pre-encrypted by Motorola, DigiCipher and PowerVu.
- Support video file playback at multiple speeds.
- Support 4K video

High density & high performance

- 2 dual-port 10G network ports. Up to 9.375Gbps streaming traffic per port.
- 5000 3.75Mbps MPEG-2 concurrent streams per node
- Up to 19.2 Mbps HD streaming per channel
- Support to play content file while ingesting
- Support IP UDP streaming

Flexible business operation

- Support for streaming with IPV4 and IPV6 protocols
- Support to ingest content file with HTTP method
- Support to insert ads in interactive video

Seamless integration with CDN

- Support NGOD C2 interface

Specifications

Chassis	2U
Storage disk	Disk type: SSD Drive slots: 24 drive slots, with 16 disks as standard configuration Capacity per disk: 240G, 480G, 960G, 1.9T, 3.8T at your choice
Power supply requirements	(Per server) Two 920W power supplies AC input: 100 to 240 VAC @ 50/60 Hz, auto-ranging from 100-240 VAC. Power consumption: 240W (2.4 A @ 100 VAC) for startup, 230W (2.3 A @ 100 VAC) for operation
Heat Dissipation	785 BTU/hr per server node
Dimension	3.5" (height) x 17.2" (width) x 24.8" (depth) per server
Weight	66 lbs per server
Streaming card	5.0GT/s PCI Express NIC 2 dual-port SFP 10G Ethernet Converged Network Adapter X520-SR2 Jitter budget < 5 milliseconds
System internal memory	8 x 16GB
CPU	Intel Xeon Scalable Processor
Single node	Up to 5000 3.75 Mbps (MPEG-2 transport streams) concurrent streams per node
Streaming performance	Up to 19.2 Mbps HD video playback per stream
Regulatory Approvals	* Part 15 A, FCC CFR 47 - This device complies with Part 15 of the FCC (Federal Communications Certification Standards) Regulations. The operation is subject to the following conditions: (1) This device does not cause harmful interference, and (2) It can withstand any interference received that may cause undesired operation. * EN55022 -Conducted emissions. European Union EMC Low Voltage Directive. * CE EU Low Voltage Directive - EN55024:1998 EN61000-4-2:1995 Immunity, ESD - EN55024:1998 EN61000-4-3:1995 Immunity, Radiated - EN55024:1998 EN61000-4-4:1995 Immunity, EFT - EN55024:1998 EN61000-4-5:1995 Immunity, Surge, ±2KV Common Mode, ±1KV Diff. - EN55024:1998 EN61000-4-6:1995 Immunity, Conducted RF - EN55024:1998 EN61000-4-8:1995 Immunity, Power Frequency Magnetic Field - EN55024:1998 EN61000-4-11:1995 Immunity, Voltage Variations - EN61000-3-2:2000 Harmonic Current Emissions - EN61000-3-3:2000 Voltage Fluctuations and Flicker * CB certification - IEC 60950-1, Information Technology Equipment – Safety. Part 1, General Requirements Editions 1 & 2 * Safety - ETL Intertek in accordance with safety standard OSHA 60950-1 Information Technology Equipment. - 60950-1, Information Technology Equipment – Safety. Part 1, General Requirements Edition 1. - CSA C22.2 No. 60950-1, Information Technology Equipment – Safety. Part 1, General Requirements Edition 1. - IEC 60950-1, Information Technology Equipment– Safety. Part 1, General Requirements Editions 1 & 2. - ROHS Compliant (Directive 2002/95/EC on the Restriction of Certain Hazardous Substances)