

RS-SG Fusion Server

4U Computational Mosaic Server



Description

Shogun computational mosaic server provides a robust, scalable backend infrastructure designed to handle the massive data streams from our panoramic cameras, ensuring real-time performance, cutting-edge AI processing, and reliable video wall management.

Functions

150MP Real-Time View

Delivers a seamless 150-400-Megapixel real-time video stream for unparalleled situational awareness.

Gigapixel Fusion Engine

Seamlessly processes and displays gigapixel video arrays by supporting real-time mosaicing of multiple 4K streams from Gigapixel Array Cameras.

High User Capacity

Supports 10+ concurrent users with independent control (zoom, pan, tilt, reset) over any area of interest, maximizing operator efficiency.

VMS & Data Services

Deploys core software services including video forwarding, decoding, streaming, database, message queue, and resource management.

Open Platform Ready

Supports industry-standard protocols (RTSP, GB/T28181, ONVIF) for easy streaming to and integration with third-party VMS platforms.

Operating System

Based on X86 architecture, using Windows Operating System for flexible deployment.



RS-SG-Fusion Server

4U Computational Mosaic Server

Technical Specification

- **CPU:** Intel® Core™ i7-14700F [Up to 5.4GHz, 20 Cores] or high-performance Intel equivalent.
- **GPU:** 2 x NVIDIA GeForce RTX 4070 SUPER or higher (dedicated for video processing).
- **Memory (RAM):** 64GB DDR5 (6400MHz) or 32GB x 2 DDR4/higher.
- **System Drive (SSD):** 512GB SSD.
- **Storage (HDD):** 10 x 18TB HDDs (Total 180TB/128TB rated) or large storage capacity equivalent.
- **Network:** 1 x 10 GigE Port; 1 x GigE Port.
- **Power Consumption:** Max 1650W.
- **Dimension:** 687*482*185 mm (Workstation Chassis).

Applications

AI SERVER

Key Feature: Extreme AI Compute, powered by multiple professional GPUs for simultaneous processing of advanced AI models (object classification, behavioral analysis, etc.).

Display the location where the alarm occurs in the panoramic video

Click the alarm AR label to display real-time alarm details, including: alarm screenshots, alarm type, alarm level, etc

Alarm list: Displays real-time and historical alarm information in the form of an alarm list, including: alarm screenshots, alarm types, alarm levels, processing conclusions, etc

Technical Specification

CPU: Intel® Xeon™ w7-3455 [Up to 4.8GHz, 24 Cores] or 1x Xeon High-Performance Processor. GPU: 4 x NVIDIA RTX A5000 or 4x NVIDIA Professional Graphics Processing Units (GPUs).

Memory: 128GB ECC DDR5 (4800MHz) or 32GB x 2 DDR4/higher.

System Drive (SSD): 512GB SSD.

AR SERVER

Focus: Real-time data overlay, map integration, and augmented visualization support.

Key Feature: Real-Time AR Overlay, supporting the fusion of real-world video with digital data for enhanced situational awareness.

Technical Specification

CPU: 1 x Intel Xeon Silver 4310 or 1x Xeon High-Performance Processor.

Memory: 64GB DDR4 ECC REG 3200MHz or 32GB x 2 DDR4/higher.

Storage: 2TB HDD x 2 / 480GB SSD NVMe or 500GB SSD.

Form Factor: 1U Rackmount (Workstation).