Intel vs. AMD Performance Results for GV-Edge Recording Manager V2.3.2

Article ID: GV4-26-04-24
Release Date: Apr. 24, 2026

Applied to

GV-Edge Recording Manager V2.3.2

Summary

The table below presents the maximum live view performance of **GV-Edge Recording Manager (GV-ERM)** on **Intel- and AMD-based systems**, with or without advanced rendering mode enabled.

Advanced rendering mode refers to a system rendering path that may increase GPU processing load and can affect live view performance depending on system configuration and enabled features.

The results indicate the **highest number of live view channels** that can be displayed while maintaining live view performance with no dropped frames. This allows readers to clearly understand the system requirements for stable, high-channel live view under the specified test conditions.

Contents

1. Test Environment

All tests in the table below were conducted using the following setup.

Monitor	Video Resolution	Stream Type	Stream Resolution	Frame Rate / Camera
4K (3840 × 2160)	4 MP	Main Stream	2688 x 1520	30 fps

2. Maximum Number of Stable Live Channels

The table below presents the performance results of GV-ERM under the test conditions described above.

PC Specs	Software	Advanced Rendering Mode	Max Stable Live View Channels (GPU Decode)	CPU Usage (Task Manager)	CPU Usage (Process Explorer)	Physical Memory	GPU Usage
• **Intel Core Ultra 7 265** Desktop Processor • Intel Graphics • 32 GB RAM • CPU Benchmark 49113 / 4684 (Multi / Single Thread) • Windows 11 Pro (25H2)	**GV-ERM** V2.3.2	**Yes**	**12 CHs** 4x4 layout	8~14%	9~16%	12.1 GB	**77~84%**
		No	**13 CHs** 4x4 layout	7~16%	5~9%	11.3 GB	**80~87%**
• **AMD Ryzen 7 9700X** Desktop Processor • AMD Radeon™ Graphics • 32 GB RAM • CPU Benchmark 37201 / 4656 (Multi / Single Thread) • Windows 11 Pro (25H2)	**GV-ERM** V2.3.2	**Yes**	**7 CHs** 3x3 layout	7~17%	8~16%	10.6 GB	**85~88%**
		No	**8 CHs** 3x3 layout	4~8%	5~8%	10.7 GB	**83~85%**

Note:

1. Advanced rendering mode behavior depends on system configuration and enabled features. When any of the following functions are used, the system operates in advanced rendering mode; otherwise, it operates in standard rendering mode.
   - **GV-ERM V2.3.1:** Advanced rendering mode is enabled when using PIP View, Focus View, Remote ViewLog (when the host is GV/UA-SNVR), PTZ Control, Wide Angle Lens Dewarping, and dewarped fisheye views (all modes except the default original view operate in advanced rendering mode).
2. The GPU Usage percentage shows the load on the graphics card when displaying the maximum number of live view channels that can be maintained without dropped frames.

3. Results

The following observations are derived from the test results.

1. The system with **Intel Core Ultra 7 265** achieves a higher number of channels than the system with AMD Ryzen 7 9700X, due to stronger GPU performance on the Intel platform.
2. The number of channels **without advanced rendering mode enabled** is higher than with it enabled, because rendering requires less processing, resulting in better performance.