

## [FAQ]

# How many 5MB Fisheye dewarping can be supported by i7 Haswell in GV-VMS v14.1?

Release Date: 1/6/2016

### Applied to

GV-VMS

### Question

How many 5MB Fisheye dewarping can be supported by i7 Haswell in GV-VMS v14.1?

### Answer

The number of fisheye dewarping channels supported (6 fisheye when using i7-4770) is hardware limited. However, there are two solutions if customer wants to dewarp more fisheye cameras:

1. They can reduce the fps of each 5MP fisheye camera to 7 or 8 fps to reduce CPU loading so the CPU should be able to handle 9 cameras' dewarping load
2. They can wait for VMS v15.1 Beta's official release (should be before end of this month) which will support fisheye camera's dual stream feature in F/W 3.0. This way, when viewing in multiple divisions each channel will be viewed in stream 2 and it will reduce the CPU loading by a lot thereby increasing the maximum number of fisheye dewarping channels supported

Fisheye Integration Note for VMS v14.1 below for reference:

## 1. Total Frame Rate Supported by GV-VMS

The table below lists the total frame rates supported by GV-VMS V14.10 for fisheye dewarping based on CPU capacity. The number of frames supported by GV-VMS is increased when a high-end CPU such as Core i7 is used.

The table is based on the following resolutions and frame rates:

- 1 MP at 15 fps (1280 x 1200)
- 2 MP at 15 fps (1440 x 1376)
- 4 MP at 15 fps (2048 x 1944)
- 5 MP at 10 fps (2560 x 1920)

### Total FPS supported

Codec	CPU	1 MP	2 MP	4 MP	5 MP
H.264	i7 - 4770	210	165	75	60
	i5 - 4670	195	150	75	60
	i3 - 4130	180	150	75	60
MJPEG	i7 - 4770	240	150	60	60
	i5 - 4670	210	135	60	50
	i3 - 4130	180	120	60	40

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**Note:** The test data is obtained using the following conditions:

- Built-in VGA
  - CPU usage at around 70%
  - 360 Degree view mode with "Auto Pan" function disabled
  - 32-screen divisions with GV-VMS's panel resolution set to 1600 x 1200
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Reference:

[ UVS - 201512178001 ] How many 5MB Fisheye dewarping can be supported by i7 Haswell?

For any question on the information provided, please feel free to submit your question to our support window at [support@geovision.com.tw](mailto:support@geovision.com.tw)