

[FAQ]

How to achieve full frame rate with GeoVision IP cameras?

Release Date: 12/19/2014

Applied to

GeoVision IP camera H.264 Series.

Question

How do I achieve full frame rate as specification indicates using GeoVision IP cameras?

Answer

Please firstly note that not all IP cameras models can achieve 30 fps as shown in the comparison charts below.

Non-IP Speed dome & Fisheye models			Fisheye models		
Resolution		FPS	Resolution		FPS
5MP	2560x1920	10	5MP	2560x1920	10
4MP	2048x1944	15	4MP	2048x1944	15
3MP	2048x1536	20	3MP	2048x1536	
2MP	1920x1080	30	2MP	1440x1376	
1MP	1280x1024	30	1MP	1280x1200	

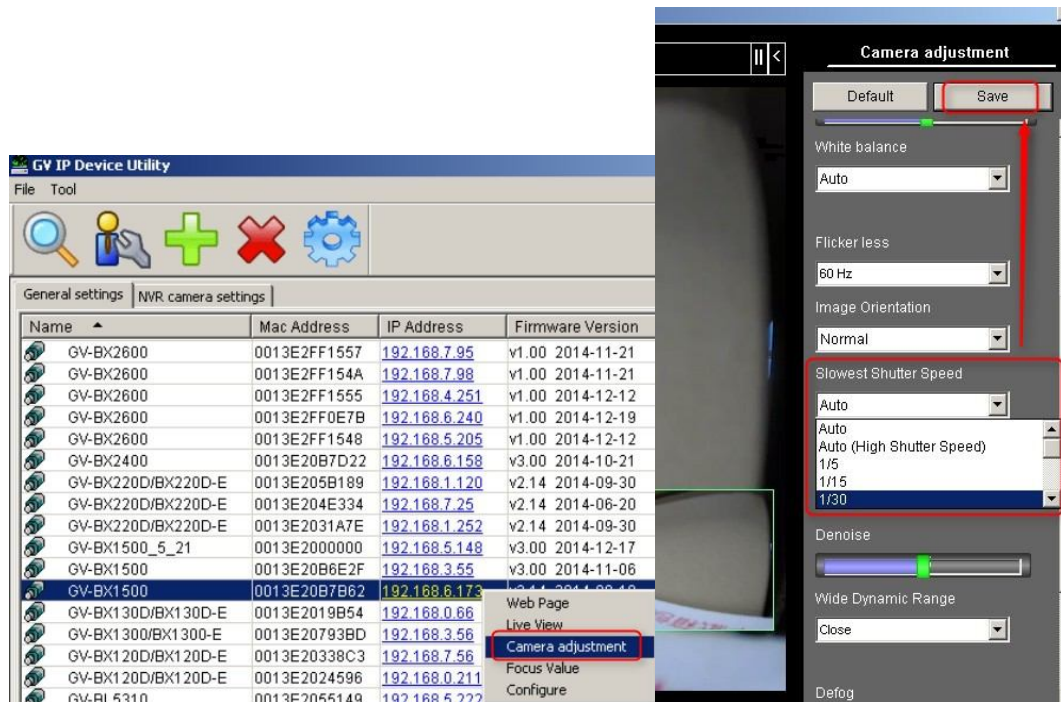
Note: For IP Speed dome models, they can support up to 30 fps using 1920x1080 resolution and 60 fps at 1280x720 resolution.

If you notice the IP camera is not streaming the maximum frame rate as specification suggests, it is recommended to verify the followings:

- **Shutter Speed:**

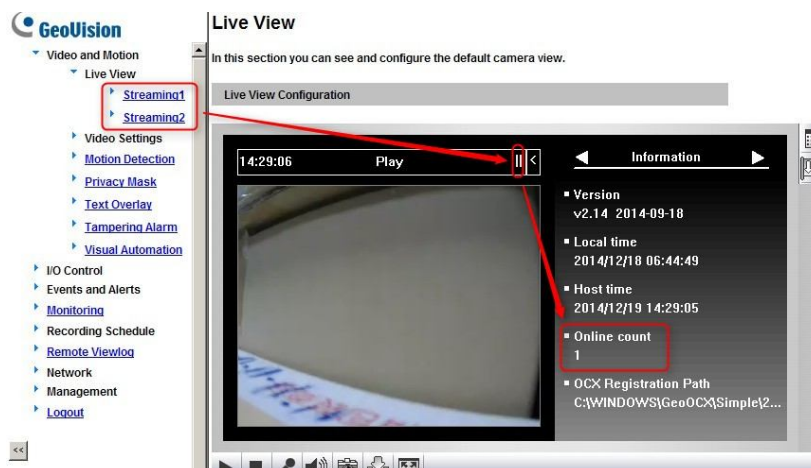
Under low light environment, IP camera will slow down the shutter speed to obtain as much light as possible. When shutter speed drops down to 1/30 or lower, it will affect the frame rate of the IP camera (e.g: Shutter Speed of 1/15 will produce fps about 15 fps)

In this case, please adjust the slowest shutter speed to 1/30 or 1/15 under Camera Adjustment using IP device utility or web interface of the IP camera.



- **IP camera's current connections:**

Decrease the number of clients (NVR, Web) connected to the IP camera to decrease the loading of IP camera. This information can be located on the web interface of the IP camera as show located below.



- **2nd Stream & Super Low Lux feature:**

The use of 2nd stream in CIF or VGA and if Super Low Lux will affect the performance of FPS and below is a reference chart on IP camera's frame rate under single, dual and Super Low Lux features.

Stream 1	1MP		2MP		2MP	
			(1920 x 1080)		(1600 x 1200)	
Stream 2	CIF	VGA	CIF	VGA	CIF	VGA
				(448x252)		
Single	Non-1500 Series: 30		Non-2500 Series: 30			
	1500 Series		2500 Series:		2500 Series:	
	30 (Super Low Lux Off);		30 (Super Low Lux Off);		27 (Super Low Lux Off);	
	29 (Super Low Lux On)		15 (Super Low Lux On)		15 (Super Low Lux On)	
					2400 Series: 20	
Dual	Non-1500 Series: 30		Non-2500 Series: 25		Non-2500 Series: 30	Non-2500 Series: 25
	1500 Series		2500 Series:	2500 Series:	2500 Series:	2500 Series:
			25 (Super Low Lux Off);	24 (Super Low Lux Off);	25 (Super Low Lux Off);	24 (Super Low Lux Off);
			15 (Super Low Lux On)	15 (Super Low Lux On)	15 (Super Low Lux On)	15 (Super Low Lux On)
	Super Low Lux On: 28	Super Low Lux On: 25	2400 Series: 25		2400 Series: 20	
Stream 1	3M P		4MP	5M P		
Stream 2	CIF	VGA	VGA	VGA/CIF		
Single	20	20	15	10		
Dual	19	15	15	8		

For any question on the information provided, please feel free to submit your question to our support window at support@geovision.com.tw