

# **AXIS Comparison**






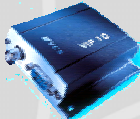



## **Description:**

- **Compares the ACTi SED-2100R vs AXIS 241S for video quality and general function.**

## **Agenda:**

- **Product Positioning**
- **Video quality comparison.**
- **Product picture**
- **Hardware / Firmware comparison.**
- **Advantages and benefits**

# Product Position - Network

	CIF/QVGA	Half D1/VGA	4CIF	Full D1
MPEG-4 ASP			 SmartSight S1700e-T \$550  AXIS 241S \$550	 Sypixx EVE-1100 \$1,000  ACTi SED-2100R \$350
MPEG-4 SP	 SmartSight S1500e-T \$400  VCS VIP 10 \$450		 Marvix Media Racer 100 \$825  IndigoVision VB8000 \$1,200	
H.263 MPEG-4 SH				
MJPEG			 AXIS 241S \$550	



# Video quality comparison

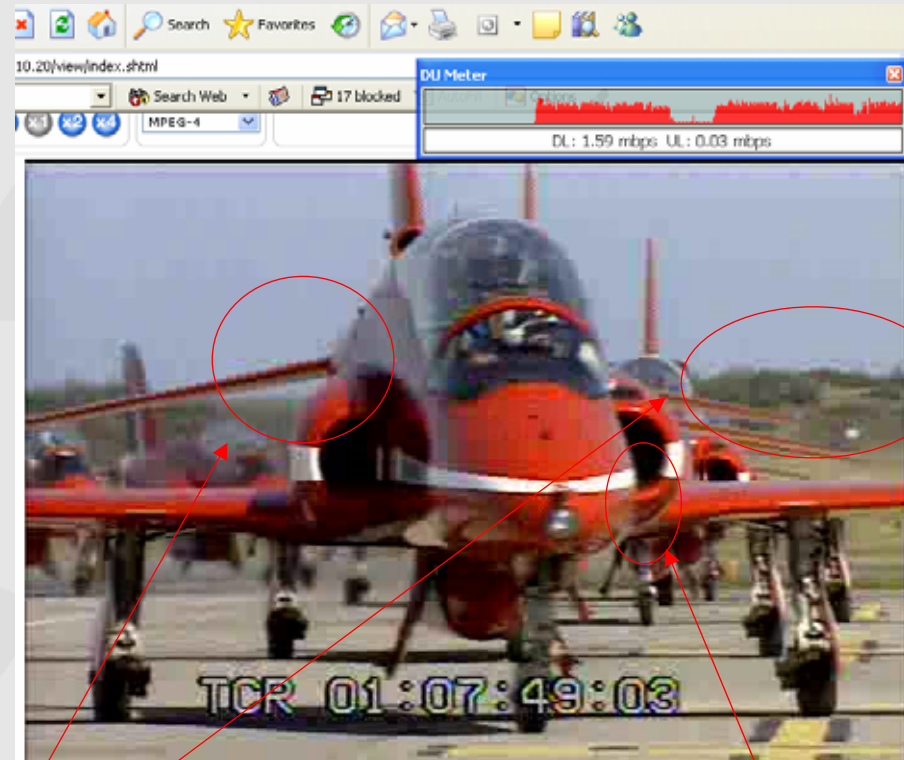
Below is a comparison table of the ACTi-2100R and the AXIS241S regarding the video quality. We connected each video server to the same DVD player, we then recorded and snapshot frames of each video stream.

	Low (Fair)	Medium (Good)	High (Excellent)
ACTi MPEG-4	500K	1.5M	3M
241S MPEG-4	1.5M	3M	6M
241S MJPEG	3M	8M	11M

# Video Quality 1.5M



**ACTi MPEG-4**

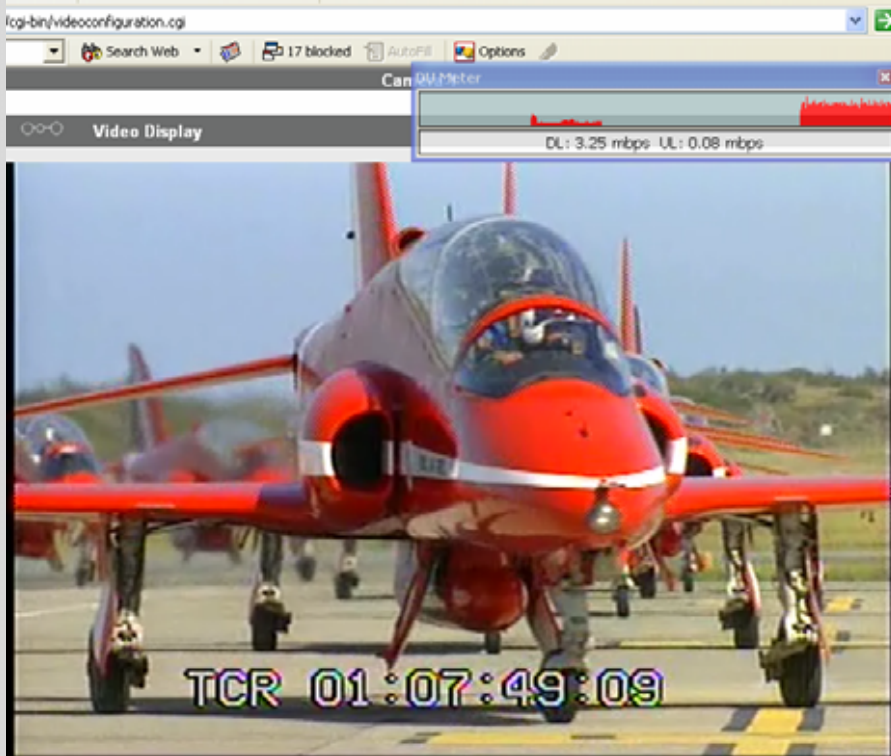


**AXIS MPEG-4**

Blur, not sharp

Interlace

# Video Quality 3M



**ACTi MPEG-4**



**AXIS MPEG-4**

Blur, not sharp

Interlacing

# Close look at AXIS MPEG-4 3M



Blur, not sharp

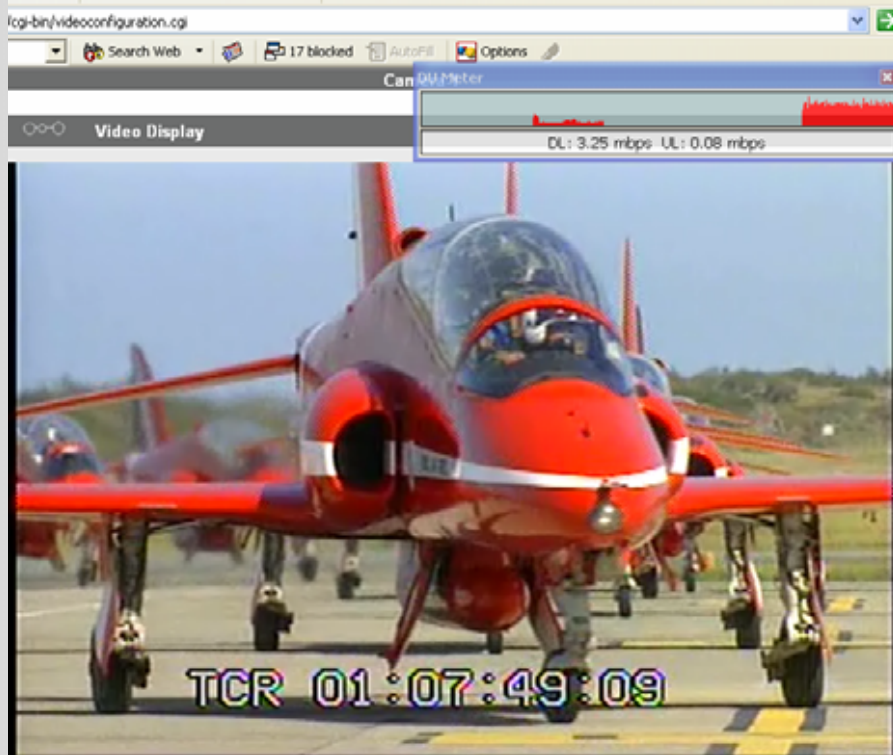
Interlacing

Blur, not sharp



**ACTi**  
Corporation

# Same video quality



**ACTi MPEG-4 (1.5M)**



**AXIS MPEG4 (3M)**

# Same video quality



**ACTi MPEG-4 (1.5M)**



**AXIS MJPEG (8M)**

# Video Clip



**ACTi MPEG-4 3M**



**AXIS MJEG-4 3M**



# Video Clip (MPEG-4)



**N/A**

**(AXIS MPEG-4 doesn't  
support recording for now)**

**ACTi MPEG-4**



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# Product Picture



## ACTi

ACTi uses a compression chip and SoM to utilize the best performance.





## AXIS

One DSP chip for compression. System usage limits its compression power. Therefore, its MPEG-4 streaming can't reach D1, 30fps.


**Note:** Only major different specs are listed.

# Hardware comparison

		 ACTi SED-2100R	 AXIS COMMUNICATIONS 241S	Advantage
Chips	Video decoder	Philip SAA7113	Philip SAA7111	Superior images delivered by the Philips SAA7113 than the SAA7111
	Compression	ASIC	DSP	Better compression power delivered by ASIC then DSP.
	System	ACTi ASoC2100	AXIS AXT6212	
I/O interface	Analog in	Yes	Yes	2 Network ports support 2 streams via LAN and/or WAN
	Analog out	Yes	Yes	
	LAN port	Yes	N/A	
	WAN port	Yes	Yes	
Certification	CE	Yes	Yes	Same
	FCC	Yes	Yes	
Installation Capability	Desktop	Yes	Yes	ACTi supports a full set of mounting options.
	Wall mount	Yes	N/A	
	Din rail	Yes	Yes	

**Note:** Only major different specs are listed.



# Firmware comparison

		 ACTi SED-2100R	 AXIS COMMUNICATIONS 241S	Advantage
Preview	Video	Active.X	Active.X	Same
	Audio	N/A (available in SED2401)	N/A	
	A/V sync	N/A (available in SED2401)	N/A	
Video	MAX resolution	D1 (720x480)	4CIF (704x480)	ACTi support better resolution
	MAX frame rate	30fps	20~30fps @D1 *	ACTi supports a full consistent frame rate at the resolution
	Time code embed	Yes	N/A	ACTi Streaming has time code embedded.
	Parameter adjust (Hue, Brightness, Contrast, Saturation)	Yes	N/A	ACTi can optimize the video quality by adjusting these parameters at the server

\* The best performance we can get from their DSP engine.

**Note:** Only major different specs are listed.



# Firmware comparison

		 ACTi SED-2100R	 AXIS COMMUNICATIONS 241S	Advantage
Network	DHCP	Yes	Yes	Same
	DNS	Yes	Yes	
	DDNS	Yes	Yes	
	HTTP	Yes	Yes	ACTi streaming supports QoS (Quality of Service)
	Multicast	Yes	Yes	
	QoS(ToS)	Yes	N/A	
	PPPoE	Yes	N/A	
	Multi-stream	Yes	N/A	ACTi can connect to xDSLmodem directly
	Load factory default	Yes	Yes	SED-2100R supports multi-streaming with different bit rates
	Latency	(3M)	360ms *1	528ms *2
(1.5M)		330ms *1	671ms *2	
(1M)		303ms *1	1sec *2	

\*1: MPEG-4, Firmware 1.02.02. \*2: MPEG-4, Firmware 4.2

**Note:** Only major different specs are listed.

# Software/other comparison

		 ACTi SED-2100R	 AXIS COMMUNICATIONS 241S	Advantage
IP utility	IP search and setup	Yes	Yes	Same
Management software	16CH management and recording	Free bundled	Free bundled	Same
SDK support	Active.X	Yes	Yes	ACTi provides a full set of SDK support
	C++	Yes	N/A	
	VB	Yes	Yes	
	URL command	Yes	Yes	
Hardware cost	Time code embed	350	656	Cuts the hardware cost by 1/2 AXIS: 656 and ACTi: 350 (USD)

**Note:** Only major different specs are listed.

# Advantages and Benefits-1

	Advantages	Your Benefits
<b>Hardware</b>		
	Superior compression power delivered by ASIC.	You can get D1 @ 30fps real time high resolution images so that you won't miss details during playback.
	2 Network ports support 2 streams via LAN and WAN	For example: In a retail store, you can use LAN port to multicast streaming for local storage and viewing, and use WAN port to stream via TCP/IP for manager to remote view.
	ACTi supports full set of mounting options.	ACTi support wall, desktop and din-rail application for easy installation.
<b>Video</b>		
	ACTi supports better resolution	With better resolution, you won't miss any details.
	ACTi Streaming has time code embedded.	Embedded time code allows applications to have "smart search" capabilities. Embedded time code also can serve as a watermark, so that if the video is altered, embedded time code will be lost.
	ACTi can optimize the video quality by adjusting <b>the</b> hue/contrast/brightness/saturation.	Better video quality at different environments, and/or different display devices

# Advantages and Benefits-2

	Advantages	Your Benefits
<b>Video</b>		
	ACTi provides multi-streamings with different bit rates (frame rates)	Optimized bandwidth allows each user to receive the most frames possible. Allows users to record and monitoring at different frame rates.
	Does Not drop frames in normal network operation	Real-time video, dvd quality video No missing frames at critical time.
<b>Networking</b>		
	ACTi streaming supports QoS (Quality of Service)	Utilize the bandwidth best so video packets can be sent to the destination at timely manner.
	ACTi can connect to xDSLmodem directly via PPPoe	In many cases such as retail shops, you can save a router cost since you can directly dial up via ACTI video server.
	SED-2100R supports multi-streaming with different bit rate (frame rates)	Optimize bandwidth and allows each user to receive streaming with different bit rates. Allows users to record and monitoring at different bit rates.
	ACTi have better latency on MPEG-4 Streaming	Better user interaction experience. Essential to PTZ control.

# Advantages and Benefits-3

	<b>Advantages</b>	<b>Your Benefits</b>
<b>Software</b>		
	<b>ACTi provides fully completed SDK with engineering support</b>	<b>We'll have tested and proved that our SDK allows application developers on different platforms to easily port ACTi products.</b>

# Summary

- **Product Positioning**
  - ACTi provides you the D1 30fps, high end IP surveillance system.
- **Video quality comparison.**
  - Excellent video quality with minimum bit rate/bandwidth, storage
- **Product picture**
  - With ASIC compression and SOM system, ACTi provides best and stable system.
- **Hardware / Firmware comparison.**
  - With LAN + WAN and QoS, ACTi fully optimize the network performance
  - ACTi supports two streamings with different bit rate.
- **Advantages and benefits**
  - ACTi brings you to next generation's product instead of sticking close to the traditional solution.