

VCS Comparison


Description:

- **Compares the SED-2100R with the VCS Videojet10 in regards to 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 VideoJet 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 VCS-VideoJet10 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
VCS MPEG-4	1.5M	4M	N/A*

*: VCS can't support MPEG-4 bit rate higher than 5M

Video Quality 1.5M



ACTi MPEG-4

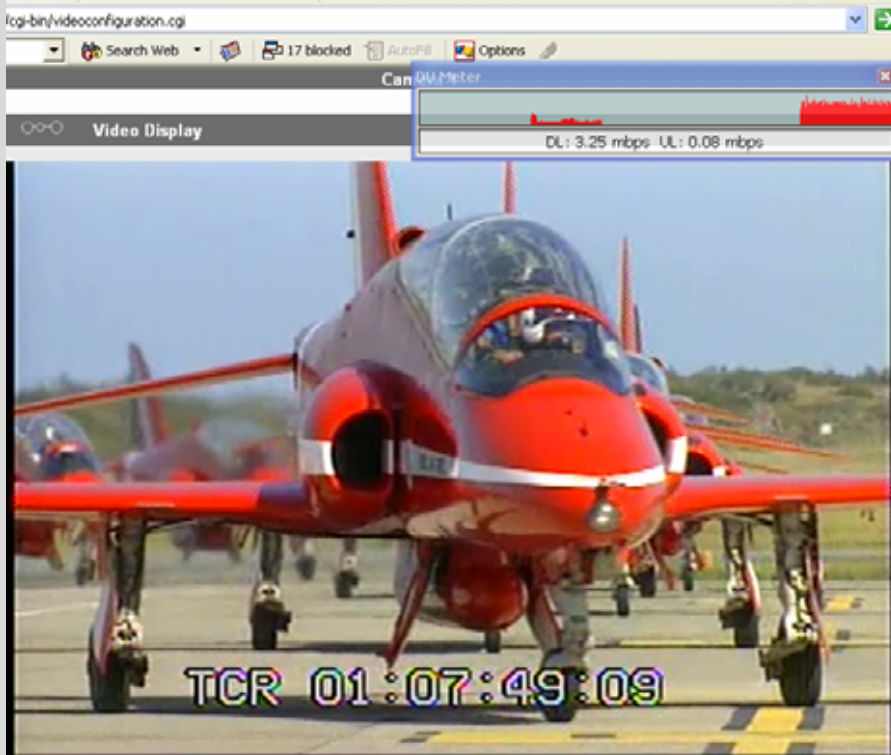


VCS MPEG-4

Blur, not sharp

Interlace

Video Quality 3M



ACTi MPEG-4



VCS MPEG-4

Blur, not sharp

Interlacing



ACTi
Corporation

Close look at VCS MPEG-4 3M



Blur, not sharp

Interlacing

Blur, not sharp

TCR 01:07:49:09

Video Clip



ACTi MPEG-4

(VCS supports a proprietary MPEG-4 which is not available to transform into standard WMV at will. It's playback software and recordings are located in the same folder)

1. Click to install VCS prerequisites
2. Click to start VCS viewer

VCS MPEG-4

Product Picture





ACTi



VCS



Note: Limited by TI and DSP, VCS can only perform D1 resolution at 12fps or less.

Hardware comparison

		 ACTi SED-2100R	 VCS VideoCommunication Systems AG VideoJet 10	Advantage
Chips	Video decoder	Philip SAA7113	TI TVP5040CPFP	Superior compression power delivered by ASIC.
	Compression	ASIC	DSP	
	System	ACTi ASoC2100	PhilipsPNX1302EH	
I/O interface	Analog in	Yes	Yes	ACTi provides analog looping for local CCTV application.
	Analog out	Yes	N/A	
	LAN port	Yes	N/A	2 Network ports support 2 streams via LAN and WAN
	WAN port	Yes	Yes	
Certification	CE	Yes	Yes	ACTi provides products with FCC regulation.
	FCC	Yes	N/A	
Installation Capability	Desktop	Yes	Yes	ACTi supports a full set of mounting options.
	Wall mount	Yes	N/A	
	Din rail	Yes	N/A	



Note: Only major different specs are listed.

Firmware comparison

		 ACTi SED-2100R	 VCS VideoCommunication Systems AG	Advantage
Preview	Video	Active.X	Active.X	ACTi Supports audio sync
	Audio	N/A (available in SED2401)	N/A	
	A/V sync	N/A (available in SED2401)	Fail	
Video	MAX resolution	D1 (720x480)	4CIF (704x480)	ACTi supports better resolution
	MAX frame rate	30fps	12fps @ 4CIF 30fps @ CIF	ACTi provides real time images at D1 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



Note: Only major different specs are listed.

Firmware comparison

		 ACTi SED-2100R	 VCS VideoCommunication Systems AG VideoJet 10	Advantage
Network	DHCP	Yes	N/A	ACTi supports DHCP and DDNS to fit into different network environment
	DNS	Yes	Yes	
	DDNS	Yes	N/A	
	HTTP	Yes	Yes	ACTi streaming supports QoS (Quality of Service)
	Multicast	Yes	Yes	
	QoS(ToS)	Yes	N/A	
	PPPoE	Yes	N/A	ACTi can connect to xDSLmodem directly
	Multi-stream	Yes	N/A	SED-2100R supports multi-streaming with different bit rates
	Load factory default	Yes	Yes	

Note: Only major different specs are listed.

Software/other comparison

		 ACTi SED-2100R	 VCS VideoCommunication Systems AG VideoJet 10	Advantage
IP utility	IP search and setup	Yes	N/A	Same
Management software	16CH management and recording	Free bundled	N/A	ACTi bundled a free 16CH completed management software
SDK support	Active.X	Yes	N/A	ACTi provides completed SDK support.
	C++	Yes	Yes	
	VB	Yes	Yes	
	URL command	Yes	Yes	
Hardware cost		350	450	Reduce the hardware cost by 1/3 VCS: 450 and ACTi: 350 (USD)

Note: Only major different specs are listed.

Advantages and Benefits-1

	Advantages	Your Benefits
Hardware		
	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 in the future
	ACTi provides loop back analog output to link up existing CCTV devices.	You don't have to buy any additional looping devices, since ACTI SED-2100R can perfectly fit in your local existing CCTV system.
	ACTi provides products with FCC certification.	It is required to sell into Northern American with FCC certification.
	ACTi supports full set of mount.	ACTi supports wall, desktop and din-rail mounting applications for easy installation.
	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.
Video		
	ACTi supports better resolution	With better resolution, you won't miss any details.
	ACTi provides real time images at D1 resolution.	D1 @ 30fps real time high resolution images so that you won't miss details during playback in the future.



Advantages and Benefits-2

	Advantages	Your Benefits
Video		
	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 hue/contrast/brightness/saturation.	Better video quality at different environment, and different display devices
Networking		
	ACTi supports DHCP and DDNS to fit into different network environments	You can save a lot of installation time and hardware requirement with these functions embedded.
	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	In many cases such as retail shops, you can save the cost of a router since you can directly connect to a ACTI video server.

Advantages and Benefits-3

	Advantages	Your Benefits
Software		
	ACTi bundled a free 16CH completed management software	For small project implementation that needs view, record, and playback, users do not need to pay extra money for management software
	ACTi provides completed SDK support	Well tested and proved SDK allows application developers on different platforms for porting to ACTi products
Networking		
	SED-2100R supports multi-streaming with different bit rate	Optimize bandwidth and allows each user to receive streaming with different bit rates. Allows users to record and monitoring at different bit rates

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 the best and most stable system.
- **Hardware / Firmware comparison.**
 - With LAN + WAN and QoS, ACTi fully optimize the network performance
 - ACTi supports two streaming with different bit rate.
- **Advantages and benefits**
 - ACTi brings you to the next generation's product instead of remaining close to the traditional solution.