



APPENDIX A

Technical Specifications

The Cisco standalone video encoders (CIVS-SENC-4P and CIVS-SENC-8P) can be used to convert analog video sources into digital formats so they can be integrated into a networked IP based video surveillance system. The 4-Port model (CIVS-SENC-4P) supports four analog video inputs, while the 8-Port model (CIVS-SENC-8P) supports eight analog video inputs. Both devices can be used in a stacked configuration, or they can be rack mounted. A power supply is included with both. [Table A-1](#) lists key features and technical specifications for both encoder models.

Table A-1 **Technical Specifications**

Feature	CIVS-SENC-4P	CIVS-SENC-8P
Protocols Supported	Supports two simultaneous video streams. The two streams can be compressed in H.264, MPEG-4 or MJPEG formats, in various combinations of resolution, frame-rate and bit-rate combinations.	Supports a single video stream per port. The stream can be compressed in H.264, MPEG-4 or MJPEG formats and configured with different resolution, frame-rates and bit-rates.
PTZ Interface	Provides a RS-485 interface to allow for connection to PTZ control units supporting the Pelco-D protocol, in order to control Pan-Tilt-Zoom functions in an external camera or PTZ mount.	Provides a RS-485 interface to allow for connection to PTZ control units supporting the Pelco-D protocol, in order to control Pan-Tilt-Zoom functions in an external camera or PTZ mount.
Digital Inputs/ Outputs	Has 4 Digital Outputs and 4 Digital Inputs to connect to/from external sensors.	Has 8 Digital Outputs and 8 Digital Inputs to connect to/from external sensors.
Web Interface	Supports Internet Explorer® 8.0 Web browser for remote setup and administration.	Supports Internet Explorer® 8.0 Web browser for remote setup and administration.
Video Management	The encoder connects to Cisco Video Surveillance Manager Version 6.3.2 and later.	The encoder connects to Cisco Video Surveillance Manager Version 6.3.2 and later.

Table A-1 Technical Specifications

Feature	CIVS-SENC-4P	CIVS-SENC-8P
Features and Benefits	<ul style="list-style-type: none"> Up to D1 Resolution per channel Up to 30 Frames per Second (FPS) at D1 resolution H.264, MPEG-4 and MJPEG Compression options Up to 2 Simultaneous Video Streams per port Up to 5 Privacy Mask windows per port Up to 3 Motion Detection windows per port 	<ul style="list-style-type: none"> Up to D1 Resolution per port Up to 30 Frames per Second (FPS) at D1 resolution H.264, MPEG-4 and MJPEG Compression options Up to 5 Privacy Mask windows per port Up to 3 Motion Detection windows per port
Analog Video Input Ports	4	8
Digital Alarm Inputs	4	8
Digital Alarm Outputs	4	8
Security	Password protected administrative interface. HTTPS access to the administrative interface.	Password protected administrative interface. HTTPS access to the administrative interface.
Certifications/Ratings/Patents	CE, FCC Class B, C-Tick UL /cUL Listed	CE, FCC Class B, C-Tick UL /cUL Listed
Port	RJ-45 connector for 100/1000 Base-TX Auto MDI/MDI-X	RJ-45 connector for 100/1000 Base-TX Auto MDI/MDI-X
Cable Type	Cat5 or better	Cat5 or better
Power Input	12VDC/24VAC (Power supply included)	12VDC/24VAC (Power supply included)
Power Consumption	24 W (Max)	24 W (Max)
Local Storage	SD/SDHC slot	
Operational Temperature	50° to 122° F (10° to 50° C)	50° to 122°F (10° to 50°C)
Operational Humidity	20% to 80%, noncondensing	20% to 80%, noncondensing
Dimensions	189 mm (L) x 153 mm (W) x 49.3 mm (H)	189 mm (L) x 153 mm (W) x 49.3 mm (H)
Weight	800g	837g
Video Encoding	H.264, MPEG-4 and MJPEG (for both PAL and NTSC)	H.264, MPEG-4 and MJPEG (for both PAL and NTSC)
Video Streams	Up to 2 simultaneous streams; the second stream is variable based on the setup of the primary stream.	Single stream per port.

Table A-1 Technical Specifications

Feature	CIVS-SENC-4P	CIVS-SENC-8P
Audio	G.711 audio encoding (64 Kbps) μ -Law, or A-Law mode selectable. Audio input (up to 1Vrms) 3.5 mm Phone Jack Audio output Terminal block x 4. Supports two-way audio (Per channel) Supports audio mute.	G.711 audio encoding (64 Kbps) μ -Law, or A-Law mode selectable. Audio input (up to 1Vrms) 3.5 mm Phone Jack Audio output Terminal block x 8. Supports two-way audio (Per channel) Supports audio mute.
PTZ Serial Interface	RS-485 Half Duplex, supporting Pelco-D protocol	RS-485 Half Duplex, supporting Pelco-D protocol
Available Resolutions	See Table A-2 .	See Table A-3 .
Minimum PC Client Requirements	<ul style="list-style-type: none"> Processor: Intel® Core® 2 Duo microprocessor, 2.6 GHz. Operating System: Microsoft® Windows® 7 Memory: 2 GB RAM Network Interface Card: 100 megabits (or greater) Monitor: Minimum of 1024 x 768 resolution, 16- or 32-bit pixel color resolution Web browser: Internet Explorer® 8.0, Quicktime 6.5 and above 	<ul style="list-style-type: none"> Processor: Intel® Core® 2 Duo microprocessor, 2.6 GHz. Operating System: Microsoft® Windows® 7 Memory: 2 GB RAM Network Interface Card: 100 megabits (or greater) Monitor: Minimum of 1024 x 768 resolution, 16- or 32-bit pixel color resolution Web browser: Internet Explorer® 8.0, Quicktime 6.5 and above

Table A-2 Available Resolutions: CIVS-SENC-4P

Dual streams supported on channels 1-4	Primary stream Max resolution	Primary Max Frame rate (fps)/ Bitrate (Kbps) or Quality/ Intra Frame period (S)	Secondary stream max resolutions	Secondary Max Frame rate (fps)/ Bitrate (Kbps) or Quality/ Intra Frame period (S)
H.264 + H.264	D1	30 fps 2000 Kbps 1S	D1	15 fps 2000 Kbps 1S
H.264 + MPEG 4	D1	30 fps 2000 Kbps 1S	D1	3 fps 2000 Kbps 1S
H.264 + MJPEG	D1	30 fps 2000 Kbps 1S	D1	30 fps Good NA

Table A-2 Available Resolutions: CIVS-SENC-4P (continued)

Dual streams supported on channels 1-4	Primary stream Max resolution	Primary Max Frame rate (fps)/ Bitrate (Kbps) or Quality/ Intra Frame period (S)	Secondary stream max resolutions	Secondary Max Frame rate (fps)/ Bitrate (Kbps) or Quality/ Intra Frame period (S)
MPEG-4 + MJPEG	D1	20 fps Good 1S	D1	30 fps NA Good
MPEG-4 + MPEG-4	D1	15 fps 2000 Kbps 1S	D1	5 fps 2000Kbps 1S
MJPEG + MJPEG	D1	30 fps Good NA	D1	25 fps Good NA

The following are the definitions of resolutions used in the table:

- D1: 720 x 480 (NTSC), 720 x 576 (PAL)
- 4CIF: 704 x 480 (NTSC), 704 x 576 (PAL)
- CIF: 352 x 240 (NTSC), 352 x 288 (PAL)

Table A-3 Available Resolutions: CIVS-SENC-8P

Stream	Max Resolution	Max Frame rate (fps)/ Bitrate (Kbps) or Quality/ Intra Frame period (S)
H.264	D1	30 fps 2000 Kbps 1S
MPEG-4	D1	30 fps 2000 Kbps 1S
MJPEG	D1	30 fps Good NA

The following are definitions of resolutions used in the table:

- D1: 720 x 480 (NTSC), 720 x 576 (PAL)
- 4CIF: 704 x 480 (NTSC), 704 x 576 (PAL)
- CIF: 352 x 240 (NTSC), 352 x 288 (PAL)