TKH GROUP | **TKH SECURITY**

S I Q U R A

S-64 E V2

4-ch H.264/MJPEG video encoder, data & digital I/O

DESCRIPTION

Take your analogue CCTV network to the digital realm of IP with our S-series video encoders. The 4-channel S-64 E v2 converts 4 analogue video signals into H.264 IP streams. Each input can stream 2 independent streams. The S-64 E v2 also features a combined Quad stream showing all 4 inputs in one single stream. This four-channel video encoder delivers crystal clear, low-bandwidth video and proven interoperability by ONVIF Profile S and Siqura's SPI.

FEATURES

Four-channel H.264 video encoder

Edge recording

960H Support

Advanced tamper detection

Image quality monitor

NEMA TS 2 compliant

NTCIP protocol support

Audio*, Digital I/O

ONVIF Profile S

Description

The Siqura S-64 E v2 is a versatile and cost-effective four-channel H.264 video encoder featuring multi-streaming, low-latency, and crystal-clear highly detailed video. The "no audio" version (NA) has been temporarily been introduced to overcome the component crises causing severe shortage of audio chips.

Quad Stream
The 4-channel encoder combines the 4-input signals into one single stream Quad image, thus saving bandwidth and precious recording capacity.

ONVIF and Siqura Programming Interface (SPI)
The S-64 E v2 supports the international ONVIF standard for remote control, configuration, video switching, and streaming. The encoder has been approved for ONVIF Profile S for streaming, PTZ, and I/O. An alternative control interface is the SPI, a comprehensive HTTP- and RTSP-based API for remote control of the encoder that makes full integration easy.

Edge recording
The S-64 E v2 offers edge recording for each video input. A recording is activated when the connection with the network recorder is lost. The missing images are available as AVI, which can easily be downloaded from the device. The recordings are stored on a single µSDHC card with a maximum capacity of 32 GB or on a NAS.

Picture enhancement
The S-64 E v2 connects to every analogue camera, even if it is not of the best quality. With a range of tools it enhances the video to a crisp, clear image. Camera noise can be eliminated by Siqura's 3D adaptive noise reduction and interlacing artifacts are removed by motion adaptive de-interlacing (M.A.D.). Brightness, contrast, hue, and sharpness of the image can be adjusted for the best result.

Image quality monitor and tamper detector
When the image from the camera becomes too poor, even for the encoder to enhance, an Image Quality alert is raised. The image is continuously monitored on contrast, exposure, focus, and noise by Siqura's unique Image Quality Monitor. In addition, the built-in tamper detector monitors changes in the position or field of view of the camera. The instant a camera's position is changed a Tamper Detect alert is raised.

Audio, I/O contacts, and serial data
By combining audio, digital I/O contacts, and data with streaming video, the S-64 E v2 provides all the interfaces necessary for any IP CCTV application. The S-64 E v2 supports 1x audio output, 4x audio inputs, 1x PTZ/serial RS-485 data, and 8x digital I/O.

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Video

Number of channels	4x PAL/NTSC autodetect
Input level	1 Vpp (3 dB)
Compression algorithm(s)	H.264, MJPEG
Encoding latency	<125 ms
Resolution	D1, 2/3D1, 1/2D1, 2CIF, CIF, VGA
GOP structure	I, IP Frame rate 1 to 30 fps
Dual streaming	2x Full frame rate at D1 resolution
Total max frames @ D1	175 fps (total of all inputs and streams.)
Quad streaming	Independent stream with all four inputs in a Quad
Quad stream resolution	SXGA (1440 x 1152), 960H, D1, 2/3D1, 1/2D1, 2CIF, CIF, VGA
Output data rate	56 kb/s up to 6 Mb/s per encoder (2 per input)
Local recording	Micro SD/SDHC up to 32 GB; NAS (Support NFS, SMBv1/CIFS)
On-screen display	3x Text lines (fully configurable), 1x graphical image (BMP, GIF or JPEG)
Input impedance	75 or Hi-Z
Connector type	BNC (with gold-plated center pin)

Video enhancement per input

Deinterlacing	Motion Adaptive Deinterlacing (M.A.D.)
Noise filter	3D Adaptive noise reduction
Image enhancement	Adjust contrast, brightness, saturation, hue, and sharpness; Automatic (mist) correction

Video analytics per input

Video motion detection	Based on movement detection in free-drawn ROI
Image quality monitor	Monitors focus, exposure, contrast, and noise
Advanced tamper detection	Blocked or moved field of view; multiple reference images per video input

Audio (Not supported by the NA version)

Audio in	4 channels in (line level) or 2 channels line level and 2 channels mic level (with bias)
Audio out	1 channel out (line level)
Interface	G.711 (U-law or A-law selectable)

Data

Number of channels	2 full-duplex
Interfaces	1x RS-422/485 (2- or 4-wire), 1x RS-232
Serial interface	TCP/UDP
PTZ protocols	Pelco P, Pelco D, Bosch, Vicon, Samsung, Panasonic, etc. (Bidirectional PTZ is not supported)
Data rate	300 b/s to 115.2 kb/s
Connector type	Spring clamp plug

Digital I/O

Number of I/O channels	8x Digital I/O
Output mode	Open collector, 24 V, 2 A max DC
Input mode	Internal pull-up 3.3 V, 2.2 k threshold 1.2 V

Specs

Digital I/O

Connector type	Spring clamp plug

Security

User authentication	three-level user access - indication of password strength
RTSP and HTTP access authentication	None, Basic, and Digest authentication
Port authentication	IEEE 802.1x (EAP or MD5)
Secure Socket	TLS1.2 protocol with 256 bit AES
HTTPs streaming	Yes
HTTPs control	Yes

Management

LED status indicator	Power on and operational; identify
Network management and control	HTTP API (SPI), ONVIF Profile S

Transmission interface

Number of interfaces	1x RJ-45
Interface	10/100/1000Base-TX, autonegotiation
Protocols	IPv4, IPv6 ready, H.264 HP, H.264 MP, (M)JPEG, RTP, RTSP, RTCP, TLS(SSL), DHCP, DNS,
	IGMPv3, NTP, HTTP(s), SAP, UPnP, DiffServ, FTP, SNMP v2c, SSM, NTCIP, NFS, SMBv1/CIFS

Powering

Input voltage	9-15 Vdc
Power consumption	6.7 W

Environmental

Operating temperature	S-64 E v2	-10 °C to +60 °C (+14 °F to +140 °F)
	S-64 E v2-XT /SA	-40 °C to +75 °C (-40 °F to +167 °F)
Relative humidity	up to 95%, noncondensing	
MTBF	200,000 hours	
Safety and EMC	IEC/EN 60950-1, IEC/EN 61000-6-3, IEC/EN 61000-6-2, EN 55022, FCC part 15	
NEMA Standard	NEMA TS 2 compliant	

Mechanical

Dimensions (h x w x d)	128 x 34 x 190 mm (5.04 x 1.34 x 7.5 in)
Weight	450 g (15.80 oz)
Housing	Rack-mount or stand-alone

Ordering information

S-64 E v2	4-ch H.264/MJPEG video encoder, audio, data & digital I/O
S-64 E V2 /SA	4-ch H.264/MJPEG video encoder, audio, data & I/O, SA
S-64 E v2-XT /SA	4-ch H.264/MJPEG video enc, audio, data & I/O, ext.temp, SA
MC 11 AC-230	Power supply cabinet, 19/3RU
MC 11 AC-115	Power supply cabinet, 19/3RU

Specs

Ordering information

MC 10 AC-230	Dual power supply cabinet 19/3RU
MC 10 AC-115	Dual power supply cabinet 19/3RU
PSR-12 DC v2 (for /SA)	Power supply unit, rail-mount, 85 - 264 Vac, 12 Vdc at 1.5 A