

Features

- Four-channel H.264 video encoder
- ONVIF Profile S
- Edge recording
- Picture enhancement
- Image quality monitor
- Advanced tamper detection
- 960H Support
- Audio, Digital I/O



S-64 E v2

Four-channel H.264 video encoder

Description

The Siqura S-64 E v2 is a versatile and cost-effective four-channel H.264 video encoder featuring multistreaming, low-latency, and crystal-clear highly detailed video.

ONVIF and Open Streaming Architecture (OSA)

The S-64 E v2 supports both the international ONVIF standard and OSA 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 OSA, 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.

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 artefacts are removed by motion adaptive deinterlacing (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.

960H Support

The S-64 E v2 supports 960H enhanced definition SD cameras. 960H Analogue cameras produce a stunning, 650 TVL resolution in PAL/NTSC or a standard definition image in an aspect ratio of 16x9 (widescreen). Ordinary encoders cannot handle 960H and will reduce horizontal resolution to standard PAL/NTSC. With this feature, S-64 E v2 encoders are able to use 960H technology for any standard PAL or NTSC camera. This means that the S-64 E v2 uses 33% more samples to encode a normal TV line, thus producing the sharpest image possible.

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.



Technical Specifications

S-64 E v2

Video

Number of channels	4x PAL/NTSC autodetect
Input level	1 Vpp (± 3 dB)
Compression algorithm(s)	H.264 (ISO/IEC 14496-10), MJPEG
Encoding latency	<125 ms
Resolution	960H, 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
Output data rate	56 kb/s up to 6 Mb/s per encoder (2 per input)
On-screen display	3x Text lines (fully configurable), 1x graphical image (BMP, GIF or JPEG)
Input impedance	75 Ω or Hi-Z
Connector type	BNC (with gold-plated centre 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

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 (24-pin to RJ-45 cable included as accessory)

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 Ω threshold 1.2 V
Connector type	Spring clamp plug (24-pin to RJ-45 cable included as accessory)

Technical Specifications

S-64 E v2

Management

LED status indicator	Power on and operational; identify
Network management and control	Siqura OSA, ONVIF Profile S
Security	HTTPS, three-level user access, Basic & Digest authentication

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, IGMPv2, NTP, HTTP(s), SAP, UPnP, DiffServ, FTP, SNMP v2c

Powering

Input voltage	9-15 Vdc
Power consumption	6 W

Environmental

Operating temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Relative humidity	<95% No condensation
MTBF (Mean Time Between Failures)	>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

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

Models	Description
S-64 E v2	Four-channel H.264/MJPEG video encoder with audio, data, digital I/O
S-64 E v2 /SA	Stand-alone version of rack-mount model
MC 11 AC-230	Power supply cabinet, 19"/3RU
MC 11 AC-115	Power supply cabinet, 19"/3RU
MC 11 AC-230 /EB-2	Power supply cabinet with SNM™ management interface, 19"/3RU
MC 11 AC-115 /EB-2	Power supply cabinet with SNM™ management interface, 19"/3RU
MC 10 AC-230 /EB-2	Dual power supply cabinet with SNM™ management, 19"/3RU
MC 10 AC-115 /EB-2	Dual power supply cabinet with SNM™ management, 19"/3RU
MC 11 DC-24V	Redundant DC power supply cabinet, 19"/3RU
PSA-UN12DC with ferrules (S-64 E v2 /SA)	Power adapter, 110 - 230 Vac 60/50 Hz to 12 Vdc 1.5 A, ferrules, with US/EU/UK adapters
PSR-12DC (S-64 E v2 /SA)	Power supply unit, rail-mount, 85 - 264 Vac, 12 Vdc at 1.5 A



The quality management system utilized in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.

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