Features

- Cost-effective H.264 video encoder
- Open Streaming Architecture
- Triple-streaming support
- Simultaneous H.264, MPEG-4/MJPEG
- Duplex serial data and stereo audio
- Video motion detection
- NTCIP protocol support

S-60 E
H.264/MPEG-4/MJPEG video server

Description

The unique Siqura® S-60 E video server combines H.264 video encoding with MPEG-4 or MJPEG. It offers an open, cost-effective solution for IP video CCTV applications. The S-60 E features high quality H.264 and MPEG-4 streaming video, low bandwidth, low latency, and interoperability with most other systems.

Open Streaming Architecture (OSA)

The S-60 E is designed with OSA offering standardised streaming video and remote control based on international standards and tested with different vendors. A comprehensive HTTP API gives access to all controls and makes integration easy. In addition, the S-60 E supports the unique Siqura® MX™ protocol.

Fiber option

The S-60 E is available with an optional pluggable SFP slot for either multimode or single-mode fiber optic connections.

Triple video streaming

The versatile S-60 E encoder is capable of streaming H.264 and MPEG-4/MJPEG simultaneously. Each stream is optimised for its purpose, e.g. high-quality H.264 live viewing, low bandwidth MPEG-4 storage, and low-resolution MJPEG for web applications or remote devices (e.g., PDAs). The H.264 implementation is based on dedicated hardware resulting in unparalleled video quality.

Audio, data, and I/O contacts

Combining streaming video with duplex audio, serial data, and I/O contacts over IP, the S-60 E provides all the interfaces necessary for any CCTV application (CD-quality stereo audio, lip–sync audio, PTZ control, alarm contacts, access control, etc.). Internal video motion detection (VMD) can be used for automated security solutions or event-triggered storage.

Web interface

Configuration, management, and live viewing are simplified by the access-controlled web interface. Full in-band control is available through the Siqura® MX™ Configuration Tool Kit or the HTTP API. The Siqura® S-60 E is field-upgradeable.

Technical Specifications
S-60 E

Video

Number of channels	1x PAL/NTSC (Auto/PAL/NTSC)
Input level	1 Vpp (±3 dB)
Compression algorithm(s)	H.264 BP (ISO/ IEC 14496-10) MJPEG, MPEG-4 (ISO/IEC 14496-2,ISMA comp.)
Types of streaming	UDP/IP (multicast and/or unicast)
Number of output streams	Up to 20
Input impedance	75 Ω/Hi-Z selectable
Video motion detection	Yes (user-defined masking)
Encoding latency	<130ms
Resolution	D1, ½D1, 2CIF, CIF, QCIF, VGA
GOP structure	I, IP (selectable)
Frame rate	1 to 30 fps
Dual streaming	D1 at 30fps H.264 + D1 at 30fps MPEG-4 + MJPEG
Output data rate	56kb/s to 20Mb/s (CBR or VBR selectable/user profiles)
Video settings	User profiles, contrast, brightness, colour saturation, hue, sharpness
On-screen display	3x text lines (configurable: position, colour, border/outline colour, font size) 1x image in BMP, GIF, or JPEG format (configurable: position, scaling)
Live view encoder	HTTP, FTP pull
Connector type	75 Ω BNC (gold-plated centre pin)

Audio

Number of channels	2 (stereo, full-duplex)
Number of streams	3 (multicast and/or unicast)
Maximum bandwidth	20 Hz to 20 kHz
Sampling resolution	8/16-bits linear PCM or G.711
Input level	Adjustable, mic or line
Output level	Adjustable, 3 Vrms maximum
Input impedance	>20kΩ or 600Ω balanced
Output impedance	<100Ω balanced
Connector type	RJ-45

Data

Number of channels	2 full-duplex
Number of streams	2 x 3 (multicast and/or unicast)
Interface(s)	1x RS-232, 1x RS-422/485 (2- or 4-wire)
Stream	TCP/UDP/MX configurable
Data rate	300 b/s to 230.4 kb/s
Connector type	RJ-45

Contact closures

Number of channels	2x in, 2x out
Number of streams	2 x 3 (multicast and/or unicast)
Output	Fail-safe, potential-free
Connector type	RJ-45

Technical Specifications
S-60 E

Transmission interface

Number of interfaces	1
Interface(s)	10/100Base-TX Fast Ethernet, autonegotiation, half-duplex/full-duplex, 10/100Mb
SFP option	Empty SFP slot for 100 Mbps SFP device
Protocols	H.264 BP, MPEG-4 ES, (M)JPEG, RTP, RTCP, RTSP, TCP, UDP, IP, DHCP, IGMPv2, (S) NTP, MX/IP, HTTP, SNMP v2, FTP, TelNet, DiffServ, SAP, UPnP, NTCIP
Connector type	RJ-45

Management

LED status indicators	
DC	Power-on indicator (green)
NV	No video on input (red)
Sync	All links are operational (green); failure in RX stream(s) (yellow); failure in TX stream(s) (red)
Ethernet port	Green LED: on = 100 Mb, off = 10 Mb; amber LED: on = link okay, flashes with activity
Network management and control	SNMP v2, MX™, HTTP API, HTML (password protected)

Powering

Power consumption	<5W
Rack-mount units	MC 10 and MC 11 power supply cabinets
Stand-alone units (/SA)	11 to 19 Vdc (PSA-UN12DC or PSR-12DC)

Environmental

Operating temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Relative humidity	<95% with no condensation
MTBF (Mean Time Between Failures)	>200,000 hours
Safety and EMC	IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, 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-60 E	H.264/MPEG-4/MJPEG video encoder with audio, data, and CCs
S-60 E-SFP	H.264/MPEG-4/MJPEG video encoder with audio, data, and CCs; empty 100 MB SFP slot
S-60 E...../SA	Stand-alone version of rack-mount models