











H.264/MPEG-4/MJPEG video encoder, audio, data, & CC

#### **Features**

- Cost-effective H.264 video encoder
- Open Streaming Architecture
- Triple streaming support
- Simultaneous H.264, MPEG-4/MJPEG
- Duplex stereo audio
- Duplex serial data
- Video Motion Detection
- 3-level access control
- SNMP and network time (NTP) support
- Remotely upgradeable



The unique Siqura® S-60 E H.264/MPEG-4 video server combines state-of-the-art H.264 video encoding with MPEG-4 or MJPEG. It's an open, cost-effective solution for IP video CCTV applications utilizing the full power of H.264, MPEG-4, and MJPEG. The S-60 E features crystal clear, and highly detailed H.264 and MPEG-4 streaming video, low-bandwidth, low latency, and interoperability with almost every other system. This versatile video IP server surpasses its competition on every terrain.

# Open Streaming Architecture (OSA)

The S-60 E is designed to comply with the worldwide adopted standards for streaming video. Its OSA offers standardized streaming video and remote control. All streaming protocols are based on approved standards and tested with different vendors. A comprehensive HTTP API gives access to all controls and makes integration with a third-party VMS easy. The API is available at Optelecom-NKF.com. In addition, the S-60 E supports Sigura®'s unique MX™ protocol.

#### **Triple Streaming per Channel**

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

# Sigura S-60 E



### 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.). The balanced audio inputs/outputs are suitable for all industrial audio systems. Internal Video Motion Detection can be used for automated security solutions or eventtriggered storage.

#### **Fiber Option**

The S-60 E is available with an optional pluggable SFP slot for connections via fiber optic cable (/SFP). A range of multimode or single-mode XSNet™ SFP devices fit the empty SFP slot.

#### **Web Interface**

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

### **IP Surveillance Solutions**

S-60 E multi-codec video servers are part of Siqura®, a complete collection of video surveillance equipment and solutions. Sigura® offers video codecs/servers, IP cameras, video management, network storage, and configuration software.

## **Ordering information**

Model	Description	Housing	Managed
Siqura S-60 E	H.264/MPEG-4/MJPEG video encoder w/audio, data, & CCs	Rack-mount	HTTP/SNMP/MX
Siqura S-60 E-SFP	H.264/MPEG-4/MJPEG video encoder w/audio, data, & CCs, empty 100MB SFP slot	Rack-mount	HTTP/SNMP/MX
Siqura S-60 E /SA	Stand-alone version of rack-mount models	Stand-alone	HTTP/SNMP/MX

# Siqura S-60 E

# **Preliminary Technical Specifications**

Video

Video channels Input level Compression algorithm

Type of streaming Number of output streams Input impedance Video Motion Detection **Encoding latency** Resolution GOP structure Frame rate Dual streaming

Output data rate

Video settings

On Screen Display (OSD)

Live View Encoder (MJPEG) Connector type

Transmission interface

Number of interfaces Interface 10/100Base-TX

SFP option Protocols

Connector type

**Powering** 

Power consumption Rack-mount units

Stand-alone units (/SA)

DC NV SYNC

Ethernet port

Network Management & Control

**Environmental** 

Operating temperature Relative humidity

**MTBF** Safety & EMC

Mechanical

Dimensions (h x w x d)

Weight (approx.)

Housing

1x PAL/NTSC (Auto/PAL/NTSC)

1 Vpp (±3 dB)

H.264 BP (ISO/IEC 14496-10) MJPEG, MPEG-4 (ISO/IEC 14496-2,

ISMA comp.)

UDP/IP (multi- and/or unicast)

Up to 20

75Ω/Hi-Z selectable Yes (user-defined masking)

<130 ms typ. D1, ½D1, 2CIF, CIF, QCIF, VGA

I, IP (selectable)

1 to 30 fps

D1 @30 fps H264 + D1 @ 30fps MPEG-4

+ MIPEG

up to 20 Mb/s (CBR or VBR selectable/

user profiles)

User profiles, contrast, brightness, color saturation, hue, sharpness

3x Text lines (configurable: position, color, border/outline color, font size),1x image in BMP, GIF, or JPEG format (configurable:

Auto Negotiation, half-duplex/full-duplex,

Empty SFP slot for 100 Mbps SFP device

H.264 BP, MPEG-4 ES, (M)JPEG, RTP, RTCP, RTSP, TCP, UDP, IP, DHCP, IGMPv2,

MC 10 and MC11 power supply cabinets 11 to 19 VDC (PSA-12 DC/25 or PSR-12 DC)

(S)NTP, MX/IP, HTTP, SNMP v2, FTP, TelNet,

position, scaling) HTTP, FTP pull

Fast Ethernet

DiffServ, SAP, UPnP

10/100 Mb

RJ45

BNC  $75\Omega$  (gold plated center pin)

**Contact Closure** 

Number of channels Number of streams Output

Connector type

Data

Number of channels Number of streams Interfaces

Stream Data rate Connector type

**A**udio

Number of channels Number of streams Maximum bandwidth Sampling resolution

Input level Output level Input impedance Output impedance Connector type

2x in, 2x out

2x 3 (multi- and/or unicast) Fail-safe, potential-free

RJ45

2 (full-duplex)

2x 3 (multi- and/or unicast)

1x RS232

1x RS422/485 (2- or 4-wire) TCP/UDP/MX configurable 300 b/s to 230.4 kb/s

RJ45

2 (stereo, full-duplex) 3 (multi- and/or unicast) 20 Hz to 20 kHz 8/16-bits linear PCM or G.711

Adjustable, mic or line Adjustable, 3 Vrms max. >20 k $\Omega$  or 600 $\Omega$  bal.

 $<100\Omega$  bal. RJ45

Management

LED status indicators Power-on indicator (green)

> No video on input (red) All links are operational (green); failure in RX stream(s) (yellow); failure in TX stream(s) (red)

Green LED: on=100 Mb, off=10 Mb; Amber LED: on=link okay, flashes with activity SNMP v2,  $MX^{\text{TM}}$ , HTTP API, HTML (password protected)

+14° F to +140° F (-10 °C to +60 °C) <95% as long as there is no condensation.

5.04 x 1.34 x 7.5 in. (128 x 34 x 190 mm)

15.80 oz. (450g)

Optelecom-nkf

Rack-mount or stand-alone (/SA)









