## S-50 E(-MSA)

# MPEG-4/MJPEG video server

#### **Features**

- MPEG-4 and MJPEG video encoder
- Image Quality Monitor and Tamper Detector
- Enhanced Video Quality
- Open Streaming Architecture
- Triple streaming support
- Duplex stereo audio
- Duplex serial data
- Video Motion Detection









## Description

The Siqura® S-50 E video server is a versatile and cost-effective solution, available in 19" rack-mount or compact housing (MSA). Utilizing MPEG-4 and MJPEG, it features low-latency, low-bandwidth and DVD quality MPEG-4 video and low-frame-rate MJPEG. It also features simultaneous streaming at different resolutions and frame rates.

#### Image Quality Monitor and Tampering Alarm

The S-50 E is fitted with video analytics to check the health of connected cameras. This image quality monitor analyzes contrast, exposure, sharpness and noise. Camera tampering analytics detect any changes in the camera's position or field of view. The instant a camera is subject to failure or tampering, an alert can be raised.

#### Enhanced Video Quality

Modern flat LCD monitors show artifacts with standard PAL or NTSC video. Standard de-interlacing loses half of the vertical resolution. Siqura's sophisticated de-interlacing scheme optimizes vertical resolution resulting in superior video images without artifacts.

### Open Streaming Architecture (OSA)

The S-50 E is designed with OSA offering standardized 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-50 E supports the unique Siqura®  $MX^{TM}$  protocol.

#### Fiber Option

The S-50 E models are available with an optional pluggable SFP slot for either multimode or single-mode fiber optic connections.

#### Triple Streaming per Channel

The versatile S-50 E encoder is capable of streaming 2x MPEG-4 and MJPEG simultaneously. Each stream is optimized for its purpose, e.g. high-quality MPEG-4 for live viewing in combination with low-bandwidth, low-frame-rate MPEG-4 for storage or time-lapse MJPEG for web applications or remote devices.

#### Audio, Data, and I/O Contacts

By combining streaming video with duplex audio, serial data, and I/O contacts over IP, the S-50 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 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<sup>TM</sup> Configuration Tool Kit or the HTTP API. The Siqura® S-50 E is field-upgradeable.

#### Ordering Information

Model Description

S-50 E MPEG-4 & MJPEG video server with audio, data, and CCs

S-50 E-SFP MPEG-4 & MJPEG video server with audio, data, and CCs, empty 100 MB SFP slot

S-50 E-MSA\* MPEG-4 & MJPEG video server with audio, data, and CCs, compact

S-50 E-MSA/SFP\* MPEG-4 & MJPEG video server with audio, data, and CCs, empty 100 MB SFP slot, compact

S-50 E-MSA/PoE\* MPEG-4 & MJPEG video server with audio, data, and CCs, compact



<sup>\*</sup>Choose the correct power adapter for your region by adding /US for the Americas, /EU for Europe, or /UK for the UK.

# S-50 E(-MSA) Technical specifications

# MPEG-4/MJPEG video server

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 Triple Streaming:\* 25/30 fps MPEG-4 25/30 fps MPEG-4/MJPEG

Output data rate

Video Settings

Video Overlay

Live View encoder Connector type

Audio

Number of channels Number of streams Maximum bandwidth

S-50 E S-50-MSA Sampling resolution Input level Output level Input impedance Output impedance Connector type S-50 E S-50-MSA

Data

Number of channels Number of streams

Interfaces

Stream

Data rate Connector type

Contact Closure

Number of channels S-50 E

S-50-MSA Number of streams

Output

Connector type

S-50 E

S-50-MSA

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

1 Vpp (±3 dB) MJPEG, MPEG-4

(ISO/IEC 14496-2, ISMA comp.) UDP/IP (multicast and/or unicast), (TCP/IP (RTP over RTSP)

Up to 20

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

<130 ms

D1, ½D1, 2CIF, CIF, QCIF, VGA

I, IP (selectable) 1 to 30 fps

1xD1 + 1x2CIF + MJPEG 1xD1 + 1xD1 + MJPEG 56 kb/s 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: position, scaling) HTTP, FTP pull, FTP push BNC 75 $\Omega$  (gold-plated center pin)

2 (stereo, full-duplex) 3 (multi- and/or unicast)

20 Hz to 20 kHz 20 Hz to 8 kHz

8/16-bits linear PCM or G.711 Adjustable, mic or line Adjustable, 3 Vrms max. >20 k $\Omega$  (600 $\Omega$  bal, S-50 E only) <100Ω (Balanced, S-50 E only)

3.5 mm stereo jack

2 (full-duplex)

2x 3 (multi- and/or unicast) 1x RS-232, 1x RS-422/485

(2- or 4-wire)

TCP/UDP/MX configurable 300 b/s to 230.4 kb/s

RJ-45

2x in, 2x out 2x in, 1x out

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

5-pin screw terminal

Transmission Interface

Number of interfaces

SFP option Protocols

Connector type Management

LED status indicators DC (S-50 E-MSA:PWR) NV (S-50 E-MSA:VID)

SYNC (S-50 E only)

LNK (S-50 E-MSA) Ethernet port

Network Management & Control

Powering

Power consumption Rack-mount units Stand-alone units (/SA)

S-50 E-MSA /PoE

Environmental

Operating temperature Relative humidity

Safety & EMC

Mechanical

S-50 E

Dimensions (h x w x d) Weight (approx.) Housing

S-50 E-MSA

Dimensions (h x w x d) Weight (approx.) Housing

10/100Base-TX Fast Ethernet,

Autonegotiation, half-duplex/full-duplex,

10/100 Mb

Empty SFP slot for 100 Mbps SFP device 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

**RJ-45** 

Power-on indicator (green). No video on input (red);

S-50 E-MSA: Video present indicator All links are operational (green): failure in RX stream(s) (yellow);

failure in TX stream(s) (red) Ethernet link operational

Green LED: on=100 Mb. off=10 Mb: Amber LED: on=link okay, flashes with

activity

SNMP v2, MX™, HTTP API, HTML (password protected)

<5W

MC10 and MC11 power supply cabinets

11 to 19 VDC

(PSA-12 DC/25 or PSR-12 DC)

IFFF 802.5 AF

-10°C to +60°C (+14°F to +140°F)

<95% no condensation.

>200,000h

IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1,

EN 55022, FCC part 15

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

450g (15.80 oz.) Rack-mount

34 x 86 x 111 mm (1.3 x 3.4 x 4.4 in.)

300g (10.54 oz.) Mini stand-alone

\*Indicated combinations are based on 100% DSP capacity







