### C-54 E-MC

## Multi-codec Video Encoder

#### **Features**

- 4-channel multi-codec video server
- Simultaneous MPEG-2, MPEG-4, and MJPEG
- · Compact field-hardened design for high-density video
- Image Quality Monitor & Tamper Detector
- Adaptive de-interlacing for enhanced quality
- · Open Streaming Architecture
- Triple streaming support
- Duplex serial data
- Video Motion Detection







### Description

The Siqura® C-54 E-MC multi-codec video server is an open, versatile, and cost-effective 4-channel solution for IP video monitoring applications, even under extreme outdoor conditions. Utilizing the full power of MPEG-2, MPEG-4, and MJPEG, the C-54 E-MC features low-latency, crystal clear, and highly detailed MPEG-2 video; low bandwidth, DVD-quality MPEG-4 video; easy to decode, low frame rate MJPEG. Each channel can transmit these streams simultaneously, at different resolutions and frame rates.

### Image Quality Monitor & Tampering Alarm

The C-54 E-MC 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 the vertical resolution resulting in superior video images without artifacts.

#### Open Streaming Architecture (OSA)

The C-54 E-MC is designed with OSA offering standard 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 C-54 E-MC supports the unique Siqura  $^{\odot}$  MX $^{\rm TM}$  protocol.

#### Triple Streaming per Channel

The versatile C-54 E-MC encoder is capable of streaming MPEG-2, MPEG-4, and MJPEG simultaneously. Each stream is optimized for its purpose, e.g. high quality MPEG-2 live viewing, low bandwidth MPEG-4 storage, and low-resolution MJPEG for web applications or remote devices (e.g. PDAs).

#### Data

By combining streaming video with serial data over IP, the C-54 E-MC provides the necessary interface for any CCTV application. 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® C-54 E-MC is field-upgradeable.

#### FTP Push

Upon an event the C-54 E-MC can post a JPG image to a remote server via one or two FTP servers. The event can be triggered externally, by VMD, the Image Quality Monitor, Tamper Detector, etc. Or it can upload images to the remote server(s) periodically.

#### Fiber Option

The C-54 E-MC is available with an optional pluggable SFP slot for direct to fiber connections. The XSNet range of SFP devices offers a variety of multimode or single-mode fiber solutions.

#### Ordering Information

#### Model

C-54 E-MC C-54 E-MC /SFP C-54 E-MC /SA

#### Description

4-Channel MPEG-2/-4/MJPEG video encoder with data, and CCs

4-Channel MPEG-2/-4/MJPEG video encoder with data, and CCs, empty 100 MB SFP slot

Stand-alone version of rack-mount models



# C-54 E-MC Technical specifications

# Multi-codec video encoder

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

Frame rate
Triple Streaming:\*
25/30 fps MPEG-2
25/30 fps MPEG-4
25/30 fps MPEG-2/MPEG-4
Output data rate

Video Settings

Video Overlay

Live View encoder Connector type

Data

Number of channels Number of streams Interfaces

Stream

Data rate
Connector type

Transmission Interface

Number of interfaces

Interface

SFP option Protocols

Connector type

4x NTSC/PAL (Auto/PAL/NTSC)

1 Vpp (±3 dB)

MPEG-2 (ISO/IEC 13818-2),

MJPEG, MPEG-4

 $75\Omega/\text{Hi-Z}$  selectable

(ISO/IEC 14496-2, ISMA comp.) UDP/IP (multicast and/or unicast) TCP/IP (RTP over RTSP) Up to 20 per channel

Yes (user-defined masking) <130 ms

D1, 2/3D1, ½D1, 2CIF, CIF, QCIF, VGA

I, IP (selectable) 1 to 30 fps

2xD1 + MJPEG

1xD1 + 1x 2CIF + MJPEG 1x 2/3D1 + 1x 2/3D1 + MJPEG Up to 14 Mb/s per channel (CBR or VBR selectable) 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)

1 (full-duplex)

2x 4 (multicast and/or unicast) 1x RS-422/485 (2 or 4-wire)

4x TX, 4x RX;

TCP/UDP/MX configurable 300 b/s to 115 kb/s

B.J-45

1 10/100Base-TX Fast ethernet.

Autonegotiation, half-duplex/full-duplex,

10/100 Mb

Slot for 100Mbps SFP device

otocols MPEG-4 ES, MPEG-2 TS, MPEG-2 ES,

(M)JPEG, RTP, RTCP, RTSP, TCP, UDP, IP, DHCP, IGMPv2, (S)NTP, MX/IP, HTTP, SNMP v2, FTP, TelNet, DiffServ,

SAP, UPnP

or type RJ-45

Management

LED status indicators

DC NV SYNC

Ethernet port

Network Management & Control

Powering

Power consumption Rack-mount units

Stand-alone units (/SA)

Environmental

Operating temperature Relative humidity

MIBH

Safety & EMC

Mechanical

Dimensions (h x w x d) Weight (approx.) Housing 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™, HTTP API, HTML (password protected)

<9W

MC10 and MC11 power supply

cabinets

11 to 19 VDC

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

-40°C to +74°C (-40°F to +165°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 or stand-alone (/SA)

\*Indicated combinations are based on 100% DSP capacity





