



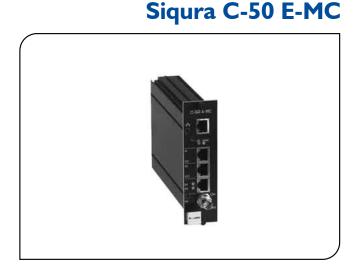




MPEG-2/-4/MJPEG video encoder, audio, data, & CC

#### **Features**

- Multi-codec video encoder
- Open Streaming Architecture
- Triple streaming support
- Simultaneous MPEG-2, MPEG-4, and MJPEG
- Duplex stereo audio
- Duplex serial data
- Field-hardened (-40° to +74° C)
- Video motion detection
- 3-level access control
- SNMP and network time (NTP) support
- Remotely upgradeable



# **Description**

The Siqura® C-50 E-MC multi-codec video server is an open, versatile, and cost-effective solution for IP video monitoring applications, even under extreme outdoor conditions. Utilizing the full power of MPEG-2 and MPEG-4, the C-50 E-MC features lowlatency, crystal clear, and highly detailed MPEG-2 video and lowbandwidth DVD-quality MPEG-4 video at full frame rate.

#### Open Streaming Architecture (OSA)

The C-50 E-MC is designed with a strong focus on standardization. Its Open Streaming Architecture offers standardized video streaming and remote control. All streaming protocols are based on standards and tested with different vendors. A comprehensive HTTP API gives access to all controls and makes integration with third-party VMS easy. The API is available on request from Optelecom-NKF. The C-50 E-MC is also compatible with Siqura®'s proprietary  $MX^{TM}$  protocol.

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

The versatile C-50 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).

## Audio, Data, and I/O Contacts

Combining streaming video with duplex audio, serial data, and I/O contacts over IP, the C-50 E-MC 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 event-triggered storage.

## **Fiber Option**

The C-50 E-MC 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 Siqura®'s software suites ( $MX^{\text{TM}}$  and Operator Office $^{\text{TM}}$ ). The Sigura C-50 E-MC is field-upgradeable.

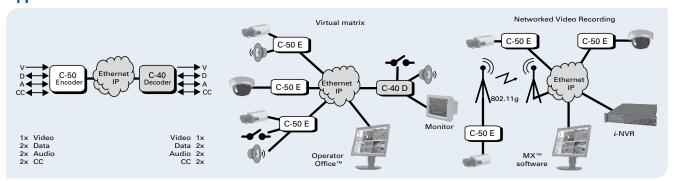
#### **IP Surveillance Solutions**

C-50 E-MC multi-codec video servers are part of Sigura®, a complete offering of video surveillance equipment and solutions. Siqura® offers video codecs/servers, IP cameras, video management, network storage, and configuration software.

# **Ordering information**

Model	Description	Housing	Managed
Siqura C-50 E-MC Siqura C-50 E-MC-SFP	MPEG-2/-4 dual DSP video encoder w/audio, data, & CCs MPEG-2/-4 dual DSP video encoder w/audio, data, & CCs, empty 100MB SFP slot	Rack-mount Rack-mount	SNMP/MX SNMP/MX
Siqura C-50 E-MC /SA	Stand-alone version of rack-mount models	Stand-alone	SNMP/MX

## **Applications**



# Siqura C-50 E-MC

# **Technical Specifications**

Video

Video channels Input level

Compression algorithm

Number of output streams Input impedance Video Motion Detection **Encoding latency** Resolution (HxV)

2CIF CIF QCIF GOP structure Frame rate Triple streaming:1 25/30 fps MPEG-22 25/30 fps MPEG-4 25/30 fps MPEG-22/MPEG-4

Output data rate

1/2 D1

Video settings

On Screen Display (OSD)

MJPEG encoder Connector type

Transmission interface

Number of interfaces

Interface

**Protocols** 

(S)NTP, MX/IP, HTTP, SNMP v2, FTP, TelNet, DiffServ3, SAP3

Connector type

**Powering** 

MC 10 and MC11 power supply cabinets

LED status indicators

DC Power-on indicator (green) NV No video on input (red)

All links are operational (green); failure in RX stream(s) (yellow); failure in TX stream(s) (red)

Ethernet port

SNMP v2, MX<sup>™</sup>, HTTP (password protected) Network Management & Control

Weight (approx.) 450 g (1 lb.)

<sup>1</sup> Indicated combinations are based on 100% DSP capacity

 $^{2}$  I-frame only, GOP = 1

<sup>3</sup> Not supported in this firmware release











Connector type

Contact Closure

Number of channels

Number of channels

Number of streams

Maximum bandwidth

Sampling resolution

Input level

Output level

Input impedance

Connector type

Output impedance

Number of channels

Number of streams

Audio

75Ω/Hi-Z selectable Yes (user-defined masking) <130 ms

I, IP (selectable/user profiles)

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

Up to 20 (multi- and/or unicast)

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

MPEG-4 (ISO/IEC 14496-2, ISMA comp.)

PAL NTSC 720x576 720x480 352x576 352x480 720x288 720x240 352x288 352x240 176x144 176x120

1 to 30 fps

1 Vpp (±3 dB)

2xD1 + Motion JPEG 1xD1 + Motion JPEG 1xD1 + 1xD1

HTTP Pull; UDP streaming<sup>3</sup>

BNC 75 $\Omega$  (goldplated center pin)

10/100Base-TX Fast Ethernet

9.6 kb/s to 20 Mb/s (CBR or VBR selectable/user profiles)

User proviles, contrast, brightness,

color saturation, hue, sharpness

Stream Data rate Connector type

Interfaces

Data

1x image in BNC, GIF, or JPEG format (configurable: position, scaling)

300 b/s to 230.4 kb/s

3x lines (configurable: position, text color, border/outline color, font, size, transparency),

2 (full-duplex)

RJ45

2x 3 (multi- and/or unicast)

Fail-safe, potential-free

2 (stereo, full-duplex)

Adjustable, mic or line

>20 k $\Omega$  or 600 $\Omega$  bal.

Adjustable, 3 Vrms max.

2x 3 (multi- and/or unicast)

1x RS422/485 (2- or 4-wire)

TCP/UDP/MX configurable

20 Hz to 20 kHz

<100 $\Omega$  bal.

2 (full-duplex)

1x RS232

RJ45

3 (multi- and/or unicast)

8/16-bits linear PCM or G.711

Autonegotiation, half-duplex/full-duplex, 10/100 Mb
MPEG-4 ES, MPEG-2 TS, (M)JPEG, RTP, RTCP, RTSP, TCP, UDP, IP, DHCP, IGMPv2,

RJ45

Power consumption <6W

Rack-mount units 11 to 19 VDC (PSA 12 DC/25 or PSR 12 DC) Stand-alone units (/SA)

Management

SYNC

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

**Environmental** 

-40° C to +74° C (-40° F to +165° F) Operating temperature <95% (no condensation) Relative humidity

**MTBF** >200,000 h

IEC/EN 60950-1, IEC/EN 60825, IEC/EN 61000 Safety & EMC 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.)

Housing Rack-mount or stand-alone (/SA)