# EVE 4X4 V2

## Modular 16-channel H.264 video encoder

### DESCRIPTION

Siqura EVE 4x4 v2 is a modular 16–channel video encoder offering high-quality video streaming performance for many video surveillance applications and CCTV. It is based on 4x 4-channel blades fitted into a single 19-inch rack. Easy snap-latch securing allows the blades to be hot-swapped. The encoder provides two GBE ports for daisy chaining multiple EVE 4x4 encoders. The encoders provides dual streaming per camera in full frame rate at best-quality H.264 high profile. With 16 channels in a rack-mountable 1HU form factor, EVE 4x4 v2 offers the highest port density at this quality of video.

### FEATURES

Modular 4x four-channel H.264 encoder

Click and Go: works out of the box

Advanced picture enhancement

Image quality monitoring

Tamper detection

Edge storage on µSDHC card per 4-ch

ONVIF Profile S

Click and Go
Out of the box, the EVE 4x4 is ready for operation and can be mounted straight or reversed in a 19" rack.  Set-up is made easy: the EVE 4x4 blades get their own addresses in the network and can be accessed by their device host name. Connect the cameras and you are ready to go. The comprehensive web app guides you through the web interface as if child's play.

Picture enhancement
The EVE 4x4 connects to every analogue camera, even if it is not of the best quality. With a range of tools it enhances the video to a crisp, clear image. Camera noise can be eliminated by TKH Security/Siqura's 3D adaptive noise reduction and interlacing artifacts are removed by motion adaptive deinterlacing (M.A.D.). Brightness, contrast, hue, and sharpness of the image can be adjusted for the best result.

Image quality monitor and tamper detector
When the image from the camera becomes too poor, even for the encoder to enhance, an Image Quality alert is raised. The image is continuously monitored on contrast, exposure, focus, and noise by the unique Image Quality Monitor. In addition, the built-in tamper detector monitors changes in the position or field of view of the camera. The instant a camera's position is changed a Tamper Detect alert is raised.

ONVIF and Siqura Programming Interface (SPI)
The EVE 4x4 supports the international ONVIF standard for remote control, configuration, video switching, and streaming. The encoder has been approved for ONVIF Profile S for streaming, PTZ, and I/O. An alternative control interface is SPI, a comprehensive programming interface for remote-control of the encoder over http.

## Video

| | |
|---|---|
| Video channels | 16x CVBS (960H), PAL/NTSC autodetect |
| Input level | 1 Vpp (+/- 3 dB) @ 75 Ohm |
| Video compression | MJPEG, H.264 HP (ISO/IEC 14496-10) |
| Encoding latency | 125 ms |
| Resolution | 960H, D1, 1/2 D1, 4CIF, 2CIF, CIF, QCIF, VGA, QVGA |
| Frame rate | 1 to 30 fps |
| GOP structure | I, IP |
| Dual streaming | 2x Full frame rate at D1 resolution |
| Total max frames @ D1 | 175 fps (total of all inputs and streams.) |
| Output data rate | 56 kb/s up to 6 Mb/s (per input) |
| Video overlay | 2x Text lines (fully configurable) |
| Connector type | BNC (with gold-plated centre pin) |

## Video enhancement per input

| | |
|---|---|
| Deinterlacing | Motion Adaptive Deinterlacing (M.A.D.) |
| Noise filter | 3D Adaptive noise reduction |
| Image enhancement | Adjust contrast, brightness, saturation, hue, and sharpness; fog correction |

## Video analytics per input

| | |
|---|---|
| Video motion detection | Based on movement detection in free-drawn ROI |
| Image quality monitor | Monitors focus, exposure, contrast, and noise |
| Tamper detection | Blocked or moved field of view |

## Audio

| | |
|---|---|
| Audio in | 4x 4 channels in (line level) or 2 channels line level and 2 channels mic level (with bias) |
| Audio out | 4x 1 channel out (line level) |
| Interface | G.711 (U-law or A-law selectable) |

## Data/PTZ

| | |
|---|---|
| PTZ channels / Serial data | 4x |
| Interface | RS-485 (2-wire) half duplex; RS-422 simplex |
| PTZ protocols | Pelco P, Pelco D, Bosch, Vicon, Samsung, Panasonic, etc. |
| Serial interface | TCP/IP |
| Data rate | 300 b/s to 115.2 kb/s |

## Digital I/O

| | |
|---|---|
| Number of channels | 4x 8 Digital I/O |
| Output mode | Open collector, 24 V, 2 A max DC |
| Input mode | Internal pull-up 3.3 V, 2.2 k threshold 1.2 V |
| Connector type | Spring clamp plug |

## Management

| | |
|---|---|
| LED status indicator | Power on and operational |

# Specs

## Management

| | |
|---|---|
| Network management and control | Siqura OSA, ONVIF Profile S |
| Security | HTTPS, three-level user access, digest authentication |

## Environmental

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|---|---|
| Operating temperature | 0 °C to +50 °C (+32 °F to +122 °F) |
| Relative humidity | 200,000 hours |
| Safety and EMC | EN50155, EN50121-3-2, conform CE regulations |
| Vibration and shock | EN50155, EN61373 |

## EVE 4x4 v2-R empty rack

| | |
|---|---|
| Expansion slots | 4x for EVE 4x4 v2-B |
| Ethernet connection | 2x RJ-45, 100/1000 Mbps autosensing |
| Power | 110 to 240 Vac, 50/60 Hz external power supply |
| Power consumption | <33 W,fully loaded |

## Dimensions

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|---|---|
| Height | 44.45 mm (1 rack unit) |
| Width | 447 mm (19" rack without mounting ears) |
| Depth | 175 mm (+ 15 mm with inserted blades) |

## Ordering information

| | |
|---|---|
| EVE 4x4 v2 | 16-channel modular H.264 video encoder, 1U 19-inch rack, dual stream H.264/MJPEG, 960H, PSU |
| EVE 4x4 v2-R | 1U video encoder rack, 4 EVE blades, 19-inch, 2 GBE ports |
| EVE 4x4 v2-B | 4-channel video encoder blade, dual stream H.264/MJPEG, 960H |
| EVE 4x4 v2-PSU | Power supply adapter for EVE 4x4 v2-R |