

ION-E400 Quad Video Encoder

Four Channel Video Encoding with
High Quality H.264 Compression

IONODES



Highlights

- Benefit from broadcast quality video using H.264 compression at 4CIF 30 fps.
- Save valuable storage space for your video archives by using H.264 compression.
- Customize your live streaming and recording scenarios by creating up to two different compression profiles per video stream.
- Install the encoder in harsh environments with extreme temperature requirements.
- Protect your data channels through SSL encryption.
- Easily integrate the appliance into your existing video management solution through the ION API.
- Make use of this versatile quad input encoder in your mobile applications.

➤ The **IONODES ION-E400** quad input video encoder is the ideal video encoding solution for high quality video surveillance applications.

High Quality Video Compression

Video is compressed to a high quality digital format and streamed in real-time over IP. Using the H.264 compression codec (MPEG4 Part 10), storage requirements can be reduced by over 50% when compared to a compliant MPEG4 SP codec. Motion JPEG compression profiles are also supported.

Dual-Encoding

The ION-E400's powerful video encoding engine can generate up to two different compression profiles per video input, allowing it to adapt to various streaming and recording environments.

Reliable

Video content can be streamed for recording on a centralized NVR system. Standard API support means you can use the ION-E400 in a multitude of software driven video surveillance solutions.

Secure

Built-in encryption capability enables support for encrypted data communication channels and secured administrative interfaces.

Built Tough

The ION-E400 is built from the ground up with industrial specs in mind. Components are designed to survive extended temperatures and a ruggedized enclosure allows the ION-E400 to be installed in various demanding environments.

Easy to Manage

The ION-E400's GUI-based web interface makes set-up and management of the appliance nearly effortless. In addition, integration of the ION-E400 into new or existing video management software is simple thanks to the intuitive ION API. The ION API exposes management and streaming functions through standard HTTP and RTSP interfaces and is supported by major NVR vendors such as Genetec and Milestone.

Mobile Applications (optional)

An available mobile version of the ION-E400 can be used in trains, buses and other mobile applications. Enhanced features such as M12 network connector, extended temperatures support, 24 VDC power supply input and others, make this version of the encoder perfect for mobile deployments.



IONODES ION-E400 Quad Video Encoder Specifications

Standard / Integrated Interfaces

Video In	Four analog video inputs : NTSC or PAL (BNC)
Audio In	Single analog audio input (terminal bloc)
Audio Out	Single analog audio output (terminal bloc)
Network	Standard 10/100 Base-T Ethernet port half/full duplex, auto-sensing, RJ-45 <i>* M12 connector support on mobile version</i>
Alarm In	Four closure contacts (terminal bloc)
Relay Out	Single output relay contact (terminal bloc)
COM Port	Single serial port (RS422/485) (terminal bloc)

Video Compression

Standards	H.264 High, Main and Baseline profiles Motion JPEG
Data Rate	64 kbps – 6 Mbps per channel (H.264 requires less than 1 Mbps @ 4CIF/30fps)
Resolutions	Full D1 (720x576/480 @ 25/30 fps) 4CIF (704x576/480 @ 25/30 fps) 2CIF (704x288/240 @ 25/30 fps) 2/3 D1 (464x576/480 @ 25/30 fps) 1/2 D1 (352x576/480 @ 25/30 fps) CIF (352x288/240 @ 25/30 fps) QCIF (176x144/120 @ 25/30 fps)
Performance	Example: 1 output profile at High Profile H.264 @ 30 fps 4CIF resolution 1 output profile at High Profile H.264 @ 7.5 fps CIF resolution
Delay	< 150 ms

Audio Compression

Standards	Uncompressed PCM High-fidelity AAC-LC G.711
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Storage

Internal	One internal micro-SD / SDHC card (2-16GB) <i>* Not supported on mobile version</i>
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Protocols

Networking	IPv4/v6, UDP, TCP, IGMP, ICMP, ARP, DHCP, DNS
Streaming	RTP, HTTP
Management	RTSP, HTTP, HTTPS, Bonjour, NTP, Telnet, FTP

General Features

System Administration	Web GUI interface (HTTP(s))
Programming Interface	ION API, GENETEC API, PSIA
System Monitoring	Video signal, storage subsystem, temperature, network monitor
Access Control	Unix credentials, SSL, Basic and Digest Authentication
System Configuration	System configuration stored on internal flash
Software Update	Fault-tolerant, remote accessible
Video Analytics	(optional) Built-in object tracking & metadata
Alarm Events	Triggered by external input or internal event monitoring

Mechanical / Environmental

Dimensions	5.75 in x 3.6 in x 1.75 in
Power	12 VDC on terminal block 3 to 4 Watts power consumption <i>* 24 VDC on mobile version</i>
Operating Temperature	-10°C to 70°C <i>* Extended temp. available (-40°C to 76°C)</i>
Approvals	FCC, CE

