

ION-R100 Video Decoder Appliance

High Definition H.264 Video Decoder

IONODES



> The **IONODES ION-R100** video decoder appliance is the ideal video decoding solution for high quality video monitoring applications.

High Quality Video Decoding

Video is de-compressed to a high quality, high definition digital format using the HDMI connector for digital video displays. For analog video, the BNC connector outputs to a standard definition NTSC / PAL composite video format.

Quad View

The ION-R100 has the ability to simultaneously decode and display up to 4 high quality H.264 streams to a quad view on the HDMI or BNC output.

Secure

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

Audio, Data and I/O Signals

Bidirectional audio, alarm inputs & relays, and serial port data channels can be paired with ION-E100 or ION-E400 for point to point applications.

Power Over Ethernet

The installer-friendly ION-R100 is powered over Ethernet (PoE) according to IEEE 802.3af which eliminates the need for power outlets.

Easy to Manage

The ION-R100's GUI-based web interface makes set-up and management of the appliance nearly effortless. In addition, integration of the ION-R100 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. The device also features native support of the GENETEC API.

Highlights

- Standard definition video output (BNC).
- High definition video output (HDMI).
- Easily integrate the decoder appliance into your existing video management solution through the ION API.
- Ability to decode video provided by any H.264 compliant video source.
- Can be combined with the ION-E100 or ION-E400 for point-to-point applications.



IONODES ION-R100 Video Decoder Appliance Specifications

Standard / Integrated Interfaces

| | |
|-----------|--|
| Video Out | HDMI Connector for digital video and audio BNC Connector for analog composite video |
| Audio In | Single analog audio input connector (3.5mm) |
| Audio Out | Single analog audio output (3.5mm) |
| Network | Standard 10/100 Base-T Ethernet port half/full duplex, auto-sensing, RJ-45 |
| Alarm In | Two closure contacts (terminal bloc) |
| Relay Out | Single output relay contact (terminal bloc) |
| COM Port | Single serial port (RS422/485) (terminal bloc) |

Video Compression

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|-------------|--|---|
| Standards | H.264 High, Main and Baseline profiles Motion JPEG | |
| Data Rate | 64 kbps – 6 Mbps per channel SD (H.264 requires less than 1 Mbps @ 4CIF/30fps) 256kbps – 8 Mbps per channel HD (H.264 requires less than 2 Mbps @ 1280 x 960) | |
| Resolutions | Analog | 500 TV Lines |
| | HD | 1080i lines |
| | | Interlacing 1920 Columns (540 lines per field-60 Fields/sec = 30 Frame/sec |
| | | 720p lines Progressive 1280 Columns 60 frame/sec |

Audio

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

Protocols

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|------------|---|
| 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 |
| System Monitoring | Video signal, storage subsystem, power supply, temperature, network monitor |
| Composite Video Out | BNC |
| Digital Video Out | HDMI |
| Software Update | Fault-tolerant, remote accessible |
| Alarm Events | Triggered by external input or internal event monitoring |

Mechanical / Environmental

| | |
|-----------------------|--|
| Dimensions | Approx 3.66 in x 1.10 in x 3.21 in |
| Power | 12 VDC on terminal block or PoE 3 - 4 Watts power consumption |
| Operating Temperature | -10°C to 60°C |
| Approvals | FCC, CE |