

ION-R100 Video Decoder Appliance

High Definition H.264 Video Decoder

IONODES



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 for point-to-point applications.

> 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 out. For analog video, the BNC connector outputs to a standard definition NTSC / PAL component 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 output.

Secure

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

Audio and Alarm Outputs

Audio output and Alarm outputs, allowing unit to be paired with ION-E100 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.



IONODES ION-R100 Video Decoder Appliance Specifications

Standard / Integrated Interfaces

Video Out	HDMI Connector for digital video and audio BNC Connector for analog component 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 Out	Two closure contacts (terminal bloc)
Relay In	Single input 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 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	Analogue HD	500 TV Lines 1080i lines 720p lines	Interlacing 1920 Columns (540 lines per field-60 Fields/sec = 30 Frame/sec Progressive 1280 Columns 60 frame/sec

Audio

Standards	Uncompressed PCM High-fidelity AAC-LC G.711
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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, open API for software integration
System Monitoring	Video signal, storage subsystem, power supply, temperature, network monitor
Component Video Out	DVI, DVI to VGA adaptor required
Digital Video Out	DVI
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
Operating Temperature	-10°C to 60°C
Approvals	FCC, CE