

IP-8i

# AES3/AES67 interface

Professional 8-channel audio to AES67 interface  
Compatible with RAVENNA, Livewire & Dante



# IP-8i - 8 stereo audio channels to AES67 interface



## Audio coding fitting to your needs

8 stereo audio channels digital AES/EBU or 4 stereo channels analogue input to AES67 Ravenna/ Dante interface

- ▶ All audio inputs will be controlled & monitored
- ▶ Live listening to monitor all audio channels via Icecast

## AES67 interface conversion

Input format: Audio

- ▶ 8x stereo digital AES3 inputs or 4x analogue
- ▶ Optional input via Icecast streaming
- ▶ 8x RS232 (RDS/UECP)
- ▶ 8x Relays input

Output format: linear PCM

- ▶ Ravenna Interface
- ▶ Dante interface
- ▶ Dual Ethernet connector for AES67
- ▶ Up to 8 AES67 IP output streams

## Backup / advanced redundancy management

- ▶ Flexible automatic switch over concept with free definition of alternative input sources as redundancy solution in case of failures
- ▶ Dual IP ports for data + 1 IP port for control interface

## Control

- ▶ 3 separated Ethernet ports;  
2x data port & 1x management port
- ▶ Remote control with various possibilities: HTTPS, FTP, NMS, SNMP,
- ▶ Revised configuration via web user interface for easier setup
- ▶ Insertion of localized advertisement
- ▶ SNMP v2c, v3, relays

## Special

- ▶ Energy efficient 24/7 broadcast quality
- ▶ Support of auxiliary data (RBDS/RDS or PAD) and GPIO forwarding

## Monitoring

- ▶ Audio and IP parameters via SNMP v2c, v3 and contact closures
- ▶ Headphone output
- ▶ Icecast live listening for confidence monitoring

## Power supply

- ▶ Base model with single power supply
- ▶ Optional: Dual internal or dual hot-swappable power supply 90 - 260 VAC or -48 VDC



# IP-8i – Audio to AES67 interface

## Advanced control functionalities

- ▶ HTTP/HTTPS: via web interface
- ▶ FTP: XML file control
- ▶ NMS: Control via centralized network management system

## Perfect audio quality

- ▶ Balanced analogue and digital AES/EBU (integrated XLR connector)
- ▶ Icecast/Shoutcast as backup input

## Advanced IP robustness functionalities

- ▶ Operates under stressful network conditions
- ▶ PRO MPEG FEC
- ▶ Management of packet size, buffer and QoS

## Highly sophisticated monitoring and alarm concept

- ▶ Adjustable silence detection
- ▶ SNMP, alarm, source switch & event logging



## Technical details 1/2



### Audio (encoder)

#### Codex

<b>Standard</b>	PCM (AES67)
<b>Optional:</b>	Icecast decoder
<b>Sample rates</b>	32 kHz, 44.1 kHz, 48 kHz
<b>Digital audio bandwidth</b>	10 Hz through to 22.5 kHz mono & stereo @48kHz sample rate
<b>Sample rate converter</b>	8:1 (up) and 1:7,5 (down) with bypass modes

#### Ethernet

<b>Data</b>	Audio, serial data and GPIO transmission, controlling and setup functions
<b>Connector Type</b>	3x RJ45 Auto switching
<b>Protocol</b>	10/100/1000 BASE-T RTP/RTCP/UDP, IGMP, ICMP, DHCP, HTTP, FTP, SNMPv2c/v3, TCP

### Interfaces

#### Audio

<b>Digital (in)</b>	8x AES/EBU, 110 Ω bal., integrated XLR-3
<b>Analog (in)</b>	4x L/R, > 10k Ω bal., integrated XLR-3
<b>Headphone (out)</b>	L/R, < 10 Ω, 6,3 mm
<b>Analog reference level</b>	+9dBu (max. +18dBu)
<b>Digital reference level</b>	-9 dBFS (adjustable)
<b>Dynamic range</b>	16 Bit, > 89 dB 24 Bit, > 130 dB
<b>Frequency response</b>	0,1 dB; 20 Hz...20 kHz

#### Serial

<b>Interface</b>	8x RS-232 Sub D-9 using break-out cable
<b>Data transmission format</b>	Ancillary data embedded in audio or own IP link
<b>Transmission rate</b>	1200 to 115200 baud, asynchronous



# Technical details 2/2

## Interfaces

### Contact closure

<b>Inputs</b>	8 inputs
<b>Outputs</b>	8 floating relays (7x SPST, 1x SPDT) (for DC: max. 30 V, 0.5 A) 26 pole sub-D male

### Internal storage

<b>Data</b>	Option: internal audio files
<b>Size</b>	7 GB

### Time synchronization (optional)

<b>PTP</b>	Network synchronization according to IEEE 1588-2008
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## Control & monitor

### Ethernet

<b>Data</b>	Controlling and setup functions
<b>Protocol</b>	2wcom NMS, Telnet, HTTP/HTTPS, UDP, IGMP, ICMP, DHCP, FTP, SNMPv2c/v3

### Front panel

<b>LCDisplay</b>	Graphical, 264x64 pixel
<b>Jog wheel</b>	Impulse, enter button
<b>4 duo LEDs</b>	Power, input, output, warning

## General data

<b>Power consumption</b>	<40 VA (<20W)
<b>Case dimensions</b>	19", 1 HU, Depth: 310 mm, Width: 424 mm, Front panel: 484 mm
<b>Weight</b>	< 6 kg
<b>Material</b>	Steel plate (aluminium-zinc coated)
<b>Operating temp. range</b>	0...+45°C
<b>Storage temp. range</b>	-40...+70°C
<b>Languages</b>	English

### Power supply

<b>Standard</b>	1x internal, 90...260 VAC, 47...63 Hz, 1x power port (IEC connector)
<b>Optional</b>	Two internal redundant power supplies (90...260 VAC or 48 VDC), 2x power port (IEC connector), automatic switchover
<b>Optional</b>	Two hot swappable redundant power supplies (90...260 VAC or 48 VDC), 2x power port (IEC connector), automatic switchover