

PHOENIX VENUS 3

DUAL STEREO AUDIOCODEC IP FULL DUPLEX
WITH LOCAL ANALOG, DIGITAL and DANTE™ AoIP CONNECTIVITY



Technical Specifications

Analog audio inputs.

- 4 x XLR female. 9Kohm. Electronically balanced. Professional line level.

Analog audio outputs

- 4 x XLR male. Output impedance < 100 ohm. Electronically balanced.
- Professional line level.

Digital audio I/O

- DB15 connector. 2 AES/EBU interfaces. SRC on inputs.

Optional IP audio inputs / outputs

- 2 stereo inputs and 2 stereo outputs with DANTE™ technology through the RJ45 NET1 (LAN) connector.

Synchronization: AES/EBU output can be synchronized with the inputs sampling frequency. Synchronization can also be transported through the AoIP network.

Audio specifications

- Nominal input level. 0dBu.
- Maximum input level. +20dBu.
- Nominal output level. 0dBu.
- Maximum output level. 20dB above nominal level.
- Max. distortion linear audio <0.003%.
- THD + N in SRC @1KHz: -117 dB.
- Dynamic range for linear audio >105dB.
- Crosstalk <-70dB.
- Analog I/O: A/D and D/A 24 bit Sigma-Delta converters, 48 kHz max.
- Modes: Mono, Dual Mono, Stereo

- Frequency response (+/- 0.2dB): 20 Hz- 20 KHz. According encoding algorithm.

Communications interfaces

- LAN & WAN Ethernet ports. 10/100 base T. Connector RJ45.
- Fully compliant N/ACIP EBU Tech 3326.
- SIP: Compliant with EBU-Tech 3326 recommendation.
- AoIP uses DANTE™ technology. You can find a list of compatible devices at www.audinate.com

ANCILLIARY DATA: Two DB 9, one for each audiocodec. Two individually configurable flows at 1.2, 2.4, 4.8, 9.6, 19.2 ó 38,4 Kbps embedded in the RTP stream.

GPIO: DB15 connector with 4 optocoupled GPIOs and 4 open collector GPOs.

Other features

- Multicast IP: transmission and reception.
- Multiple-unicast in RTP-raw mode: allows the unit to send a same stream to up to 10 different IPs.
- SIP: according to EBU-Tech 3326 recommendation. Possibility of operation with or without SIP Proxy server.

Encoding algorithms

- **OPUS** with 48KHz sampling frequency, mono or stereo. 4 selected mono modes and 3 stereo ones with bitrates between 12 and 192kbps and audio bandwidth between 6 and 20kHz.
OPUS Voice (reduced bw) 12kbps : 6kHz.
OPUS Voice 20kbps.: 8KHz.
OPUS Music mono (reduced bw):32 kbps.: 20kHz.
OPUS Music mono 64kbps.: 20kHz.
OPUS Music Stereo (reduced bw) 64kbps.: 20kHz.
OPUS Music Stereo 128kbps.: 20kHz.
OPUS Music Stereo HQ 192 kbps.: 20kHz
- **G711** A law, μ law (64kbps, low delay, 3.5 KHz audio bandwidth).
- **G722** (64 Kbps, low delay , 7 KHz audio bandwidth).
- **AEQ-LD** Fs=16, 32 or 48KHz, mono or stereo. Bit-rates between 64 and 384 Kbps, audio bandwidths between 7 and 20 KHz.
- **MPEG1 & 2-LII**, Fs between 16 and 48 KHz, mono, stereo, dual channel and joint stereo. Bit-rates between 64 and 384 Kbps. Audio bandwidths between 10.5 and 16.5 KHz.
- **AAC-LC*** high quality, with Fs=24, 32 and 48 KHz, mono, stereo, MsStereo, bit-rates between 32 and 256 Kbps, audio bandwidths between 9 and 20 KHz.
- **AAC-LD*** high quality and low delay, Fs=48 KHz, mono, stereo and MsStereo. Bit-rates between 32 and 256 Kbps, audio bandwidths between 8 and 20KHz.
- **PCM (linear)** very low delay and transparent quality. Fs=48 KHz or 32 KHz @ 12, 16, 20 or 24 bits/sample, mono or stereo (bit-rates between 576 and 2304 Kbps), audio bandwidths between 15 and 20 KHz.

General Features

- Range of operational temperature: -10 to + 45 ° C (14 to 114 ° F).
- Dimensions and weight: 1RU, 482 x 44 x 280 mm ; 19" x 1.75" x 11"). Weight: 3,5 kg (7,7 lbs)
- Input power: Two Power Supply 110 _ 240 V AC, 50 _ 60Hz. 12 w. autoranging. 3 PIN IEC connector*. One or two 48V DC power supplies (optional).
- Ventilation. Natural convection – totally silent. Apt for in-Studio use.

* The AAC encoding algorithms are optional for the Phoenix Audio-Codexs.

* Check the application notes in the web site.

Ordering information

- o VENUS 3 Phoenix audiocodec with DANTE™ local connectivity, 80-250V 50/60Hz power supply.
- o VENUS 3 Phoenix audiocodec without DANTE™ local connectivity, 80-250V 50/60Hz power supply.
- o DC 48V power supply (substituting one of the AC power supplies).
- o Control Phoenix software with license to simultaneously control more than two Phoenix audiocodecs.

Specifications subject to change without prior notice.