BIAMP®

Tesira® SERVER-IO
Digital Audio Network Server
DATA SHEET

The Tesira® SERVER-IO is a digital network server for use with the Tesira digital audio networking platform. It is factory configured with one DSP card and is capable of handling up to two additional DSP cards. The SERVER-IO can be configured with one 420 x 420 channel AVB card or one AVB card and one or two 32 x 32 channel SCM CobraNet® cards. An integral network card provides redundant network connection for configuration setup and control of the Tesira network. The SERVER-IO can support up to 12 Standard Tesira I/O cards for up to 48 channels of audio I/O (e.g. mic and line level, VoIP, and telephone interface). The on-board DSP features two new Biamp algorithms, SpeechSense™ and AmbientSense™, which enhance speech processing by more accurately distinguishing between human speech and noise. The DSP also provides extensive audio processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay as well as control, monitoring and diagnostic tools; all configured through the Tesira design software.

BENEFITS

- Offers flexibility to have scalable DSP and I/O in the same device
- Enables I/O to be distributed from a central location
- Customizable I/O configurations for easy right-sizing of system design
- Control networking can run on separate (existing) Ethernet network

FEATURES

- Up to 3 DSP cards
- Up to 12 I/O cards with maximum 48 channels of audio
- Up to 420 x 420 channels of digital I/O with AVB
- Optional 32 x 32 CobraNet audio networking
- Configuration and control networking over Ethernet
- Supports network redundancy
- Local GPIO connections
- Front panel LCD display for device and system information
- New processing algorithms: SpeechSense and AmbientSense
- Signal processing via intuitive software allows configuration and control for: signal routing and mixing, equalization, filtering, dynamics and delay and much more
- Wide selection of I/O cards available
- 4-channel Acoustic Echo Cancellation card (also includes AGC and ANC) and Ambient Noise Compensation card available
- Extensive expansion devices (Input, Output, Logic, etc) available as part of the Tesira digital networking platform
- Rack mountable (3RU)
- CE marked, UL listed, RoHS compliant
- Covered by Biamp Systems' 5-year warranty

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ARCHITECTS & ENGINEERS SPECIFICATION

The digital audio network server shall be designed exclusively for use with Tesira systems. The server shall support AVB digital audio and control networking by means of a modular 420 x 420 channel card. The server shall also support use of one or two 32 x 32 channel CobraNet digital networking cards. The server shall be configured with at least one DSP card and shall be capable of supporting a total of three cards. The server shall provide dual Ethernet ports for redundant configuration and control connection. The server shall be configurable for up to 48 channels of local audio input and output, including mic and line level, VoIP, and telephone interface. The server shall also support modular I/O cards for acoustic echo cancellation and ambient noise compensation. The server shall provide front panel LED identification of server power, status, alarm, and activity as well as system-wide alarm. The server shall provide front panel LCD display for server and system information. The server shall be rack mountable (3RU) and feature software-configurable signal processing, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools. The server shall be CE marked, UL listed and shall be compliant with the RoHS directive. Warranty shall be five years. The server shall be a Tesira SERVER-IO.

SERVER-IO SPECIFICATIONS (audio specifications given reflect use of SIC-4 and SOC-4)

Frequency Response (20Hz~20kHz @ +4dBu):	+0/-0.25dB	**Phantom Power:**	+48 VDC (7mA/input)
THD+N (20Hz~20kHz):		**Input Gain Range (6dBs):**	0 - 66dB
@ 0dB Gain, +4dBu In	< 0.006%		
@ 54dB Gain, -50dBu In	< 0.040%		
EIN (20Hz~20kHz, 66dB Gain, 150 ohm):	< -125dBu	**Sampling Rate:**	48kHz
Dynamic Range (20Hz~20kHz, 0dB):	> 108dB	**A/D – D/A Converters**	24-bit
Input Impedance (balanced):	8k ohm	**Power Consumption (100~240VAC 50/60Hz):**	< 150W
Output Impedance (balanced):	200 ohm	**Overall Dimensions:**	
		Height:	5.25 inches (133 mm)
Cross Talk (channel to channel @ 1kHz):		**Width:**	19.0 inches (483 mm)
@ 0dB Gain, +4dBu In	< 85dB	**Depth:**	17 inches (432 mm)
@ 54dB Gain, -50dBu In	< 75dB		
Maximum Input:	+24dBu	**Weight:**	18 lbs (8.2 kg)
Maximum Output:	+24dBu	**Compliance:**	FCC Part 15B (USA)
			FCC Part 68 (USA)
			Industry Canada CS-03 (Canada)
			CE marked (Europe)
			UL and C-UL listed (USA & Canada)
			A-Tick (Australia)
			C-Tick (Australia)
			RoHS Directive (Europe)

SERVER-IO BACK PANEL