# BIAMP®

Tesira® SERVER
Digital Audio Network Server
DATA SHEET



**The Tesira® SERVER is a digital network server for use with the Tesira digital audio networking platform. It is typically configured with one DSP card and is capable of handling up to seven additional DSP cards. For digital audio networking it can be configured with up to two network cards for AVB or CobraNet® in any combination. An integral network card provides redundant network connection for configuration setup and control of the Tesira network as well as GPIO connection. In cases where local I/O is advantageous, a Tesira standard I/O card may be installed. The modular 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 designer software.**

## BENEFITS

• Highly scalable processing that can grow over time with the needs of the end customer

• Flexibility for any I/O device to harness the processing available in the server

• Enables I/O devices to be located at end points

• Offers flexibility for control network to run on separate (existing) Ethernet network

## FEATURES

• Supports up to 8 DSP cards

• 420 x 420 channels of I/O per AVB-1 card

• Optional 32 x 32 CobraNet audio networking

• Configuration and control networking over Ethernet

• Supports network redundancy

• Supports AVB

• Supports CobraNet

• 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, delay and much more

• Extensive expansion devices (Input, Output, Logic, etc) available as part of the Tesira digital audio networking platform

• CE marked, UL listed, RoHS compliant

• Covered by Biamp Systems' 5-year warranty

---

Biamp Systems, 9300 S.W. Gemini Drive, Beaverton, Oregon 97008 U.S.A. (503) 641-7287 www.biamp.com
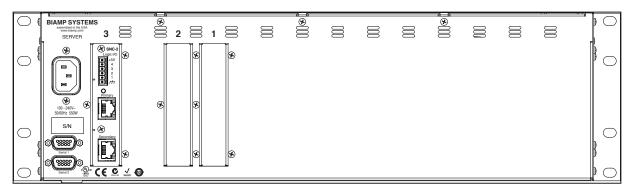
# BIAMP

## 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 420 x 420 modular card. The server shall also support an additional 420 x 420 channel AVB networking card or one or two 32 x 32 channel CobraNet networking cards. The server shall be configured with at least one DSP card and shall be capable of supporting a total of eight cards. The server will also accommodate one standard analog I/O card in lieu of one network card. The server shall provide dual Ethernet ports for redundant configuration and control connection. 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.

## SERVER 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 (6dB Steps): | 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 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 BACK PANEL