DATA SHEET
TESIRA® SERVER
DIGITAL AUDIO NETWORK SERVER

The Tesira® SERVER is a digital network server for use with the Tesira digital audio networking platform. It is factory configured with one DSP card yet capable of handling up to seven additional DSP cards. It is also factory configured with one AVB-1 Audio Video Bridging digital audio networking card. A second card slot can be populated with an additional AVB card, an SCM-1 CobraNet® network card, or a DAN-1 Dante™ network card. In cases where local I/O is advantageous, a Tesira standard I/O card may be installed. An integral network card provides network connection for configuration and control of the Tesira network. The modular DSP features Biamp SpeechSense™ technology, which enhances 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. Two Tesira SERVERs can also be designed as a redundant pair (if they carry identical processing and I/O card configurations). The secondary SERVER stays 'live' with the primary, updating runtime parameters. If the primary SERVER should need maintenance, the secondary takes over with no loss of continuity or downtime.

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
- Up to 420 x 420 channels of digital I/O over AVB
- Supports optional 64 x 64 Dante audio networking
- Supports optional 32 x 32 CobraNet audio networking
- System configuration and control via Ethernet or serial connection
- Front panel OLED display for device and system information
- Processing algorithm: SpeechSense

- Supports redundancy for continuous uptime
- Signal processing via intuitive software allows configuration and control for: signal routing and mixing, equalization, filtering, dynamics, delay and much more
- Extensive input, output and logic expansion devices supported as part of the Tesira digital audio networking platform
- Rack mountable (3RU)
- CE marked, UL listed and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

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 factory configured 420 x 420 modular card. The server shall also support an additional 420 x 420 channel AVB networking card, one 32 x 32 channel CobraNet® networking card, one 64 x 64 channel Dante™ networking card, or one standard analog I/O card. The server shall be factory configured with one DSP card and shall be capable of supporting a total of eight cards. The server shall provide dual Ethernet ports for configuration and control connection. The server shall support redundancy if both the primary secondary units are identically configured. 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 OLED 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 5 years. The digital audio network server shall be Tesira SERVER.

TESIRA 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):		**Cross Talk (channel to channel @ 1kHz):**	
@ 0dB Gain, +4dBu In:	< 0.006%	@ 0dB Gain, +4dBu In:	< -85dB
@ 54dB Gain, -50dBu In:	< 0.040%	@ 54dB Gain, -50dBu In:	< -75dB
EIN (20Hz~20kHz, 66dB Gain, 150Ω):	< -125dBu	**Overall Dimensions:**	
Dynamic Range (20Hz~20kHz, 0dB):	> 108dB	**Height:**	5.25 inches (133 mm)
Tail Length:	up to 300ms	**Width:**	19.0 inches (483 mm)
Convergence:	up to 100dB/sec	**Depth:**	17.0 inches (432 mm)
Input Impedance (balanced):	8kΩ	**Weight:**	18 lbs (8.2 kg)
Maximum Input:	+24dBu	**Sampling Rate:**	48kHz
Input Gain Range (6dB Steps):	0 - 66dB	**A/D Converters:**	24-bit
Output Impedance (balanced):	200Ω	**Compliance:**	
Maximum Output:	+24dBu		FCC Part 15B (USA)
Power Consumption (100~240VAC 50/60Hz):	< 150W		FCC Part 68 (USA)
			Industry Canada CS-03 (Canada)
			CE marked (Europe)
			UL and C-UL listed (USA & Canada)
			RCM (Australia)
			EAC (Eurasian Customs Union)
			RoHS Directive (Europe)

TESIRA SERVER BACK PANEL