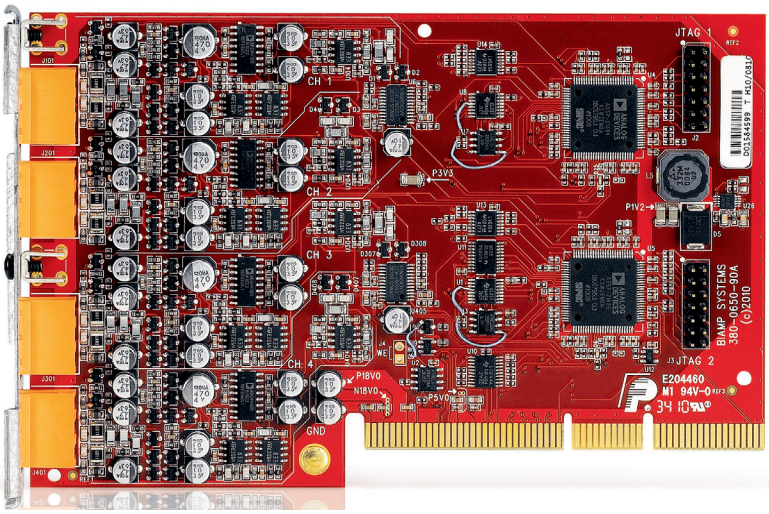
DATA SHEET
TESIRA® SEC-4
4-CHANNEL MIC/LINE MODULAR INPUT CARD WITH AEC



The Tesira® SEC-4 is a modular analog input card for use with Tesira SERVER or SERVER-IO devices. Each SEC-4 provides 4 channels of mic or line level audio input with Acoustic Echo Cancellation. The inputs are electrically balanced and provided on plug-in barrier strip connectors. Carrying on the Biamp tradition of exceptional echo cancellation technology, the SEC-4 utilizes the next generation of the Sona™ AEC technology. The card also features a new Biamp algorithm, SpeechSense™, which enhances speech processing by more accurately distinguishing between human speech and noise. Software control is separated into separate blocks for mic/line inputs and AEC processing. This allows the system designer to use the inputs independent of the AEC processing, and apply the AEC algorithm to inputs from a different part of the system. The SEC-4 also includes processing for Automatic Gain Control, high pass filter and noise reduction.

BENEFITS

- Modular I/O cards can be mixed-and-matched both in Tesira SERVER and Tesira SERVER-IO
- Ability to process inputs and AEC separately allows echo cancellation to be applied to local or remote inputs
- Proven echo cancellation performance with next generation Sona AEC technology
- More natural communication through greater tolerance for differing signal levels and enhanced intelligibility

FEATURES

- 4 channels of balanced mic or line level input
- 4 channels of Acoustic Echo Cancellation using Biamp's wide-band Sona technology
- New processing algorithm: SpeechSense
- Processing includes High-Pass Filter
- Additional noise reduction on AEC outputs
- Does not use processing resources from SERVER or SERVER-IO DSP
- RoHS compliant and AES grounded
- Covered by Biamp Systems' 5-year warranty

biamp.
A: 9300 S.W. Gemini Drive Beaverton, OR 97008 USA T: +1 503.641.7287 W: www.biamp.com

ARCHITECTS & ENGINEERS SPECIFICATION

The acoustic echo cancellation shall be a 4-channel card designed exclusively for use with Tesira Server devices. The modular card shall provide 4 balanced mic or line level inputs on plug-in barrier strip connections. Software configuration and control for each input shall include: gain with clip indicator, phantom power on/off, mute, level, and signal invert. The acoustic echo cancellation algorithm shall be configured and controlled separately in software and include processing for high-pass filtering, automatic gain control and noise reduction. Programmable parameters shall include: conferencing mode, noise reduction, threshold, mute and level. The modular input card shall incorporate AES48-2005 Grounding and EMC practices and shall be compliant with the RoHS Directive. Warranty shall be 5 years. The input card shall be Tesira SEC-4.

TESIRA SEC-4 SPECIFICATIONS

Frequency Response (20Hz~20kHz @ +4dBu):	+0/-0.25dB	**Phantom Power:**	+48 VDC (7mA/input)
THD+N (20Hz~20kHz @ +4dBu, AEC off):		**Cross Talk (channel to channel @ 1kHz):**	
@ 0dB Gain (line level):	< 0.006%	**@ 0dB Gain, +4dBu In**	< 85dB
@ 54dB Gain (mic level):	< 0.055%	**@ 54dB Gain, -50dBu In**	< 75dB
Tail Length:	up to 300ms	**Sampling Rate:**	48kHz
Convergence:	up to 100dB/sec	**A/D Converters:**	24-bit
EIN (20Hz~20kHz, 66dB Gain, 150Ω):	< -125dBu	**Compliance:**	
Dynamic Range (20Hz~20kHz, 0dB):	> 108dB		AES48-2005 Grounding and EMI practices RoHS Directive (Europe)
Input Impedance (balanced):	8kΩ		
Maximum Input:	+24dBu		
Maximum Gain:	66dB		
Input Gain Range (6dB Steps):	0 - 66dB		