DATA SHEET
TESIRAFORTÉ® DAN AI FIXED AUDIO DSP

The TesiraFORTÉ® DAN AI is a fixed audio DSP with 32 bi-directional channels of Dante™ digital audio, 12 analog inputs, 8 analog outputs, and includes up to 8 channels of configurable USB audio. USB audio allows TesiraFORTÉ to interface directly with USB audio hosts, as well as to take full advantage of today's most sophisticated conferencing solutions. TesiraFORTÉ DAN AI 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 software. TesiraFORTÉ DAN AI is best-suited for small- to medium-sized rooms that require high-quality audio solutions using voice lift and mix-minus, such as conference rooms or council chambers.

BENEFITS

- Includes default configuration file, allowing for plug-and-play usage
- Highly scalable and cost-effective solution that can grow over time with the needs of the customer
- SpeechSense™ technology enhances speech processing
- Integrates directly with soft codecs and other USB audio hosts

FEATURES

- 32 x 32 channels of digital audio networking via the Dante protocol
- 12 mic/line level inputs, 8 mic/line level outputs
- 2 Gigabit Ethernet ports: Dante digital audio and Tesira control
- Up to 8 channels of configurable USB audio
- RS-232 serial port
- 4-pin GPIO
- 2-line OLED display with capacitive-touch navigation
- Rack mountable (1RU)
- System configuration and control via Ethernet
- Internal universal power supply
- Signal processing via intuitive software allows configuration and control for signal routing, mixing, equalization, filtering, delay and much more
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' 5-year warranty

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ARCHITECTS & ENGINEERS SPECIFICATION

The fixed audio DSP shall be designed exclusively for use with Tesira® systems. The audio DSP shall support Dante™ digital audio networking that shall allow up to 32 x 32 channels. The Dante networking connection shall be implemented on a RJ-45 connector. The audio DSP shall support Ethernet connection for programming and control on a RJ-45 connector. The audio DSP shall have internal DSP processing. The audio DSP shall include 4 channels of General Purpose Input and Output connection (GPIO) for sending or receiving logic signals. The programming of the GPIO ports shall be software configurable. The audio DSP shall include a RS-232 connection for control data transmission into or out of the audio DSP and such operation shall be software programmable. The audio DSP shall include a Universal Serial Bus (USB) connection on a standard USB-B type connector. The audio DSP shall be software configurable to stream up to 8 channels of digital USB Class 1 Audio transmission either into or out of the audio DSP or simultaneous input and output. The audio DSP shall provide 12 balanced input connections for receiving of microphone or line level analog audio signals on screw-down, removable connectors. The audio DSP shall provide 8 balanced output channels for the transmission of microphone or line level analog audio signals on screw-down, removable connectors. Each individual channel shall have its own dedicated connection. The audio DSP shall provide front panel OLED identification of device power, status, alarm, and activity as well as system-wide alarm. The audio DSP shall be rack mountable (1RU) 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 audio DSP shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The fixed audio DSP shall be TesiraFORTÉ DAN AI.

TESIRAFORTÉ DAN AI SPECIFICATIONS

Frequency Response:	
20Hz to 20kHz, +4dBu output:	+0.25 dB/-0.5 dB
THD+N (22Hz to 22kHz):	
0dB gain, +4dBu input:	< 0.006%
54dB gain, -50dBu input:	< 0.040%
EIN (no weighting, 22Hz to 22kHz):	< -125dBu
Dynamic Range (in presence of signal)	
22Hz to 22kHz, 0dB gain:	> 108dB
Input Impedance (balanced):	8kΩ
Output Impedance (balanced):	207Ω
Maximum Input:	+24dBu
Maximum Output (selectable):	+24dBu, +18dBu, +12dBu, +6dBu, 0dBu, -31dBu
Input Gain Range (6dB steps):	0-66dB
Overall Dimensions:	
Height:	1.75 inches (44 mm)
Width:	19.0 inches (483 mm)
Depth:	10.5 inches (267 mm)
Weight:	8 lbs (3.63 kg)
Environment:	
Ambient Operating Temperature Range:	32-104° F (0–40° C)
Humidity:	0–98%, non-condensing
Altitude:	0-6,600 feet (0–2000 Meters) MSL

Phantom Power:	+48VDC (7mA/input)
Crosstalk, channel to channel, 1 kHz:	
0dB gain, +4dBu input:	< -85dB
54dB gain, -50dBu input:	< -75dB
Sampling Rate:	48kHz
A/D - D/A Converters:	24-bit
Power Consumption:	
100-240VAC 50/60Hz:	< 35W
USB:	
Bit Depth:	16- or 24-bit
Number of Channels:	up to 8
Sample Rate:	48kHz
Compliance:	
	FCC Part 15B (USA)
	CE marked (Europe)
	UL und C-UL listed (USA and Canada)
	RCM (Australia)
	RoHS Directive (Europe)

TESIRAFORTÉ DAN AI BACK PANEL