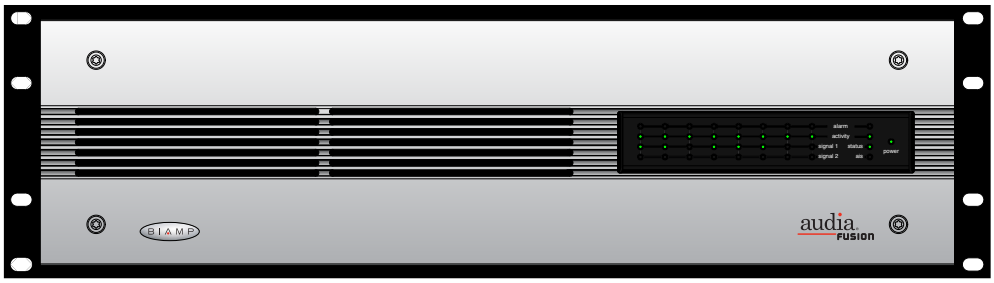
BIAMP®

AudiaFUSION
Networked Amplified Processor



AudiaFUSION is the newest member of the Audia® family, bringing together open-architecture DSP, Multi-Channel Amplifier technology, and device- and load-monitoring capabilities. AudiaFUSION features an 8-channel modular amplifier, 16x16 I/O via CobraNet® and DSP with support for channel-to-channel and device-to-device failover. AudiaFUSION can support up to 8 amplifier cards that are individually software configurable from 100-600 watts for up to 2400 watts of power, with software-selectable 70V, 100V and low impedance outputs per card. Intuitive software provides audio system design via PC and allows easy selection, viewing and calibration of numerous audio components: mixers, combiners, matrixes, equalizers, filters, crossovers, dynamics, routers, delays, meters, generators, diagnostic tools, and more. Once a system design is compiled, it is downloaded into AudiaFUSION, where it can be controlled via AMX®, Crestron®, other third-party control system, or via computer running daVinci™ control software. When installed in a system together, AudiaFLEX and AudiaFUSION processing resources are allocated as needed, making the whole system more efficient.

FEATURES

- Modular based design
- Amplification modules have software configurable power levels/load options
  - 8 amplification modules per frame with 100 to 600 Watts per module (maximum of 2400W per chassis)
  - 70V or 100V with direct drive capability, or low-impedance (4 or 8Ω) operation
  - Maximum of 2400 Watts of power in 3 rack spaces
- TCP/IP Network controllable
- LED Indication:
  - Signal present
  - Peak present
  - Clip present
  - Heat sink temperature fault
  - Amplifier failure
  - Fan stuck-rotor
- Internal amplifier module failover mode
- Entire device failover mode
- Software Monitoring Features:
  - Peak present
  - Heatsink temperature value, warning and fault
  - Short circuit on output
  - Amplifier failure
  - Impedance min/max threshold warning
  - Excessive clipping
  - Fan stuck-rotor
- Seamless integration with CobraNet-enabled Audia systems
- CobraNet Interface (16 channels in/16 channels out)
- CobraNet latency 5-1/3, 2-2/3 or 1-1/3 ms, software configurable
- Dual CobraNet ports for redundancy
- Selectable 115/230 volt operation
- Control via RED-1, daVinci or third party control systems
- **CE** marked, **UL** listed & **RoHS** compliant
- Covered by Biamp Systems' warranty

ARCHITECTS & ENGINEERS SPECIFICATION

The modular networked amplified processor shall be designed exclusively for use with Biamp® Audia® systems. The networked amplified processor shall be modular and support software configurable power levels/load options of 8 amplification modules per frame with 100 to 600 Watts per module (maximum of 2400W per chassis) and 70V or 100V with direct drive capability, or low-impedance (4 or 8Ω) operation. The networked amplified processor shall provide control data and digital audio over CobraNet®. The networked amplified processor shall provide dual CobraNet ports for redundant network connection. The networked amplified processor shall provide front-panel LED identification of amplifier and card failure, signal present, clip present, fan stuck-rotor fault, heatsink temperature fault, and provide additional software monitoring features including short circuit on output fault. The networked amplified processor shall be rack mountable (3RU) and feature software-configurable signal processing including volume control, filters, compressor/limiting, delay, speaker equalization, and output sensitivity. The networked amplified processor shall support channel-to-channel and chassis-to-chassis failover. The networked amplified processor shall be CE marked, UL listed and shall be compliant with the RoHS directive. Warranty shall be five years.

The networked amplified processor shall be an AudiaFUSION.

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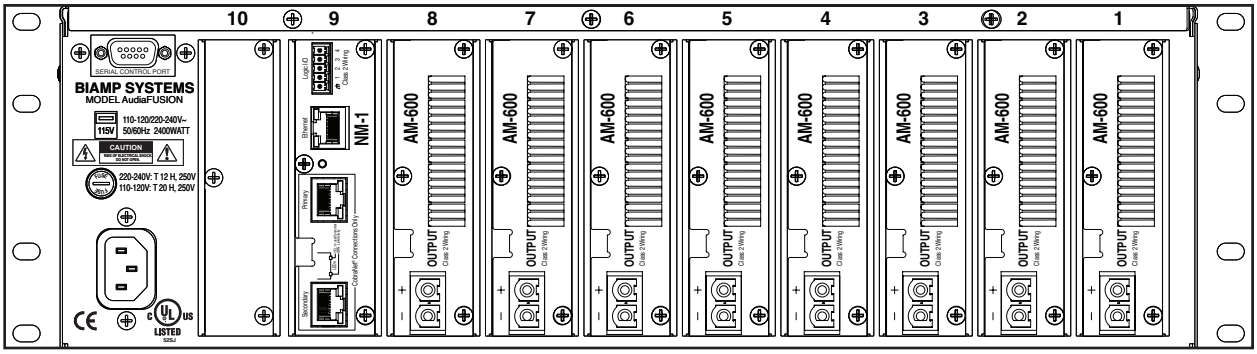
AudiaFUSION SPECIFICATIONS

Inputs:	20 bits, 48 kHz, supported CobraNet latency 5-1/3, 2-2/3 or 1-1/3 ms software configurable
Outputs:	
Supported Loads	4 or 8 or 70-Volt line, or 100-Volt line direct drive
Continuous Operation[1]	1 kHz continuous sine wave indefinitely
Frequency response	20 Hz – 20 kHz (+/- 1dB)
Signal-to-Noise Ratio (unweighted, 22 Hz – 22 kHz)	4 8 70V 100V
100W - 600W	>95dB >95dB >100dB >101dB
THD + N:	≤ 0.3% (20 Hz - 20 kHz) all loads & power levels
Intermodulation distortion (SMPTE)	<0.2%
Inter-channel isolation	>-75dB (20 Hz - 2 kHz, full power out)
DC offset	<10 mV
Connection	RJ45 with shielded Ethernet cable (CAT5, CAT5e, CAT6, or CAT7)

Power:	110-120 & 220-240 VAC switch selectable, 50/60Hz
Overall Dimensions:	
Height	5.25 inches (133mm)
Width	19 inches (483mm)
Depth	17.25 inches (438mm)
Weight:	
Chassis	50 lbs. (22.68 kg)
AM-600 card	1.25 lbs. (0.57 kg)
Environment:	
Ambient Operating Temperature Range	32 - 95 degrees F (0 - 35° C)
Ambient Intake Humidity	0 - 100% non-condensing
Altitude	0 - 10,000 Feet MSL
Compliance:	EU Directive 2002/95/EC, RoHS directive CE marked UL listed

1. In chassis with fans running normally and unrestricted intake and exhaust

AudiaFUSION BACK PANEL



AudiaFUSION BLOCK DIAGRAM