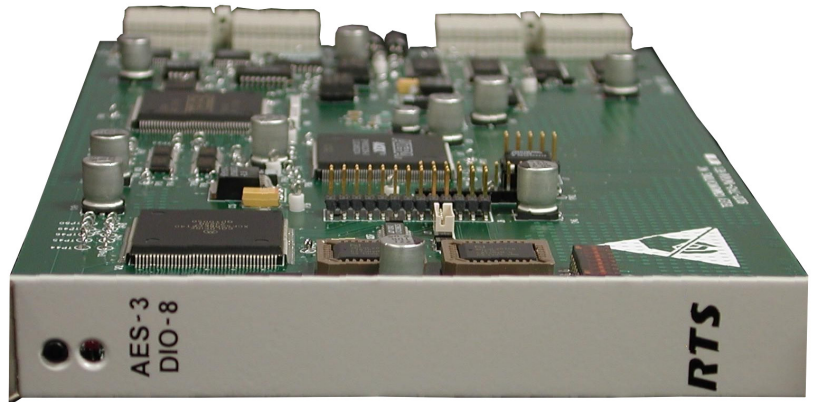


## AES-3

### Digital Audio Interface Card Kit

The AES-3 Digital Audio Interface Card expands the connectivity to the ADAM Intercom by supporting AES-3 over coaxial cable. It supports eight (8) audio channels in and out through four (4) AES-3 connections. The AES-3 card provides connectivity to any other third party AES-3 audio device. It supports all standard hot swappable and configurable features within the ADAM Intercom family. This card supports incoming sample rates from 16kHz to 108kHz with 24-Bit audio. Outputs are compatible with all AES-3 recommended procedures. Along with the RVON-8/RVON-16 VoIP cards, the RTS ADAM intercom systems now natively support analog, AES-3 digital and VoIP signal formats.



## Features

- The AES-3 cards are hot swappable to allow live insertion into any I/O slot in the ADAM frame.
- The TDM & Control Bus interfaces are compatible with the current & next generation ADAM Matrix TDM & control buses.
- Hardware & firmware compatible with current and next generation ADAM matrix systems.
- Provides downloadable firmware features through AZedit.

## Specifications

### Performance Specifications

Dynamic Range: 128dB

Input Sample Rate (serial input port - Fsi): 16 to 108kHz

Output Sample Rate (Fso): 44.1kHz

Output Data: 16-Bits capable of 24-Bits

Output to Input Sample Ratio Rate: 0.33 to 3

Peak Idle Channel Noise Component: -140dBFS

Resolution: 16–24-Bits

### Digital Filter Characteristics

Passband:

Upsampling:  $0.4535F_{si}$  Hz

Downsampling:  $0.4595F_{so}$  Hz

Passband Ripple:  $\pm 0.007$ dB

Stopband (Downsampling):  $0.5465F_{so}$  Fsi/2Hz

Stopband Attenuation: 110dB

Group Delay: 175ms

Group Delay Variation vs. Frequency:  $0.0\mu$ s

Interchannel Phase Deviation:  $0.0^\circ$

High-Level Input Voltage, except RXP, RXN:  $2.0-(V_{D+})+0.3$ V

Low-Level Input Voltage, except RXP, RXN:  $-0.3-0.8$ V

Low-Level Output Voltage ( $I_o=-20\mu$ A), except TXP and TXN: 0.4V

High-Level Output Voltage ( $I_o=-20\mu$ A), except TXP and TXN:  $(V_{D+}) -1$ V

Input Leakage Current:  $\pm 10 - \pm 15\mu$ A

Differential Input Voltage, RXP to RXN: 200mV

Output High Voltage, TXP and TXN:  $(V_{D+}) -0.07 (V_{D+}) -0.4$ V

Output Low Voltage, TXP, TXN:  $0.4 - 0.7$ V

### Switching Characteristics

RMCK Output Jitter: 200ps RMS

AES-3 Transmitter Output Jitter: 1ns

## Order Information

AES-3 • AES-3 • Digital audio interface card

The specification information is preliminary and is subject to change without notification.  
Brand names mentioned are the property of their respective companies.