# nion nio-aes



# **AES Input/ Output Card**

**Data Sheet** 



## **Description**

The NION NIO-AES Input/Output Card is an AES I/O device configured in 8 pairs of channels. The AES I/O device is for use in NION DSP nodes. Depending on the NION model up to 4 NIO-AES cards may be loaded in a NION DSP node.

#### **Features**

- Eight Channel Pairs of AES Input or Output audio channels
- Inputs or Output Channel pairs may be selected individually in software
- 48 or 96 kHz audio sampling rate supported

- S/PDIF Supported, enabled with internal dipswitches
- High reliability DIN Connector to backplane, using slide rail for alignment
- Mini-Euro Connectors for easy input connection

### **Specifications**

AUDIO CHANNELS (PAIRS)	8	Each Channel pair software configured as inputs or outputs
AES/EBU INPUT IMPEDANCE	110 Ohms	Transformer balanced / isolated
AES/EBU OUTPUT IMPEDANCE	112 Ohms	Transformer balanced / isolated
S/PDIF INPUT IMPEDANCE	78 Ohms	Transformer balanced / isolated
S/PDIF OUTPUT IMPEDANCE	74 Ohms	Transformer balanced / isolated
AES/EBU OUTPUT VOLTAGE	5 Vp-p	110 Ohm load
AES/EBU OUTPUT RISE/FALL TIME	6 ns	110 Ohm load
SAMPLE RATE CONVERSION RANGE	32 kHz – 96 kHz	SRC can be disabled
MAX SIGNAL ATTENUATION FOR AES/EBU INPUT	-20 dB	
MAX RISE TIME FOR AES/EBU INPUT	30 nS	
S/PDIF MODE	YES	Hardware configured (circuit board jumpers

## **Architect's & Engineer's Specifications**

The NIO-AES input/output processing card shall be an eight discrete channel paired device designed to enable AES or S/PDIF inputs or outputs to the NION DSP audio processing node. The slide rail support industrial package is designed to easily install in one of the slots provided on the rear of the NION DSP audio processing node. The connection at the rear of the card shall use a DIN connector. Cards shall be available for mic and line level analog audio with options for digital and proprietary audio transports. All cards types shall include separate software devices for integration into NWare configuration file. The mic-line level input processing card shall be the MediaMatrix NIO-AES or approved equal.

