# ion



# Line Level Output Card

**Data Sheet** 



# Description

The NION NIO-80 Line Output Card is an 8 channel line level output device for use in NION DSP frames. Depending on the NION model up to 4 NIO-80 cards may be loaded in a NION DSP.

### **Features**

- Eight Line Level Output audio channels
- 24 bit A/D
- 48 or 96 kHz audio sampling rate supported
- High reliability DIN Connector to backplane, using slide rail for alignment
- Mini-Euro Connectors for easy output connection

# **Specifications**

AUDIO CHANNELS	8	Line-level signals only
FREQUENCY RESPONSE	20 ~ 20 kHz (+0.5/-0.6 dBr)	Referenced @ 1 kHz. 22 dBu output level.
RELATIVE PHASE	+/- 0.4 degrees	20 ~ 20 kHz, referenced @ 1 kHz. 22 dBu output level.
THD+N	0.004%	22 kHz bandwidth measurement, +4 dBu signal with 20 dB Headroom
DYNAMIC RANGE	-110 dB	A-weight filter measure
CROSSTALK	-107 dB	20 ~ 20 kHz, measured between channel pairs (1-2, 3-4, 5-6, 7-8)
MAXIMUM INPUT SENSITIVITY SETTINGS	NA	
ANALOG GAIN	NA	
FULL-SCALE OUTPUT SETTINGS	+24, +18, +12, +6 dBu	Less than 1.0 dB error between settings
LINE INPUT IMPEDANCE	NA	
MIC INPUT IMPEDANCE	NA	
OUTPUT IMPEDANCE	100 ohms	Balanced
MINIMUM LOAD IMPEDANCE	600 ohms	Referenced to +22 dBu output
SAMPLE RATE	32 kHz – 96 kHz	

- All specifications are typical for any channel(s). All measurements are made with an AC line of 120 Volts rms / 60 Hz. 2. 3.
- All measurements are made using 600-ohm balanced loads at 24 dBu full scale unless otherwise stated. 4. All measurements are made in the analog domain with gain/attenuation set for unity unless otherwise stated
- 5. All measurements are made using 48 kHz sample rate

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

The line level input processing card shall be an eight discrete channel device designed to enable line level analog outputs for 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 the configuration file. The line level output processing card shall be the MediaMatrix NIO-80 or approved equal.

