

Mic/Line Level Input Card



Description

The NION NIO-8 ml II Mic/Line Input Card is an 8 channel mic/line level input device for use in NION DSP frames. Depending on the NION model up to 4 NIO-8i cards may be loaded in a NION DSP.

Features

- Eight Line Mic or Line Level Input 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 input connection

Specifications

AUDIO CHANNELS	8	Mic-Line-level signals
FREQUENCY RESPONSE	20 ~ 20 kHz (+/-0.5 dB)	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	-102 dB	20 ~ 20 kHz, measured between channel pairs (1-2, 3-4, 5-6, 7-8) +33 to -42 dBu
PHANTOM POWER	48 VDC	Available on a per channel basis
MAXIMUM INPUT SENSITIVITY SETTINGS	+33 to -42 dBu	In 3db increments, less than 1.0 dB error between settings
ANALOG GAIN	-3 TO +60 dB	True analog gain
FULL-SCALE OUTPUT SETTINGS	NA	
LINE INPUT IMPEDANCE	5.3K Ohms	Effective for sensitivities of +33 dbu to +6 dbu
MIC INPUT IMPEDANCE	1.9K Ohms	Effective for sensitivities of +3 dbu to -42 dbu
OUTPUT IMPEDANCE / MINIMUM LOAD IMPEDANCE	NA	
EQUIVALENT INPUT NOISE (EIN)	-129 dBu	Referenced to +22 dBu output, 150Ω input termination, 22 kHz bandwidth measurement, Gain = 66 dB.
SAMPLE RATE	32 kHz – 96 kHz	

Notes:

1. All specifications are typical for any channel(s).
2. All measurements are made with an AC line of 120 Volts rms / 60 Hz.
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 mic-line level input processing card shall be an eight discrete channel device designed to add mic preamps and/or line level analog inputs 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 NWare configuration file. The mic-line level input processing card shall be the MediaMatrix NIO-8ml II or approved equal.