

N978

4 Channel Variable Gain Fast Amplifier



Features



- x10 Adjustable Gain (x1 Steps)
- Input bandwidth up to 250 Mhz
- 50 Ohm Input Impedance
- ± 2 V output dynamics
- 50 Ohm loads driven
- Cascadeable Channels
- Rise/fall time smaller than 1.5 ns
- I/O delay smaller than 3 ns

Description

The CAEN **Mod. N978** is a 4 channel fast rise time amplifier housed in a one unit wide NIM module; each channel features a voltage gain variable in the range $0 \div 10$. Channels are non-inverting and bipolar: they amplify both positive and negative signals. Input bandwidth is 250 MHz for signals up to 50 mVpp and decreases for larger ones (up to 100 MHz @ 300 mVpp). Gain setting can be performed independently for each channel via four rotary handles. Channels can be cascaded in order to obtain larger gain values. Each channel is provided with three LEMO 00 connectors, one for the input and two bridged for the output. The board features a ± 2 V output dynamics. 4 screw-trimmers (one per channel) allow the offset calibration which operates over a ± 30 mV range.

Technical Specifications

Packaging

1U-wide NIM unit

Voltage gain

0 ÷ 10

Rise time

< 1.5 ns (unipolar input, ±25 mV max. amplitude)

Band width

DC to 250 MHz with ±25 mV input signal
DC to 100 MHz with ±150 mV input signal

Output dynamic range

±2 V

Max input amplitude

200 mV peak-to-peak

Inputs channels

4, DC coupled, 50 Ohm ± 2% impedance

Output channels

4 with Fan-Out of two, drive 50 Ohm load

Noise

< 50 µV RMS (referred to the input)

Offset nulling range

±30 mV (measured with 0 Ohm termination on input)

Interchannel insulation

50 dB

Input reflection

< 10%

I/O Delay

< 3 ns

Offset uniformity

±4 mV (typical)
±12 mV (maximum)

NOTE

Specifications measured with gain = 10

Ordering Options

Code	Description
WN978XAAAAAA	N978 - 4 Channel Variable Gain Fast Amplifier RoHS

Related Products

NIM8304



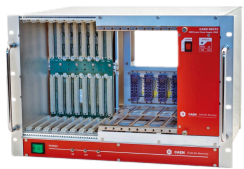
7U 12 slot smart fan unit Switching 2000 W Crate

NIM8303



5U 12 slot 300/600 W Crate

NV8020A



7U CRATE VME/NIM 8 slot VME64 365W, 5 slot NIM 150W

NIM8302P



5U 5 slot 150 W Portable Crate

NIM8306



2 Slot Switching 750 W Mini Crate

NIM8302



5U 10 slot 150 W Compact Crate

NIM8305



2 Slot Switching 450 W Mini Crate



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