
NI-9222

Getting Started

2023-08-02



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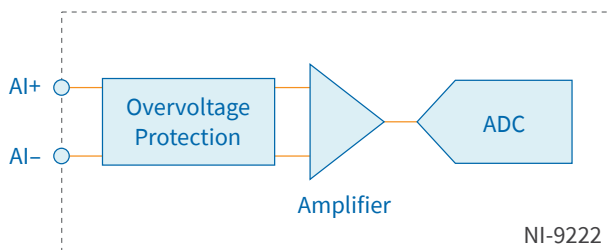
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NI-9222 Getting Started

Connector Types

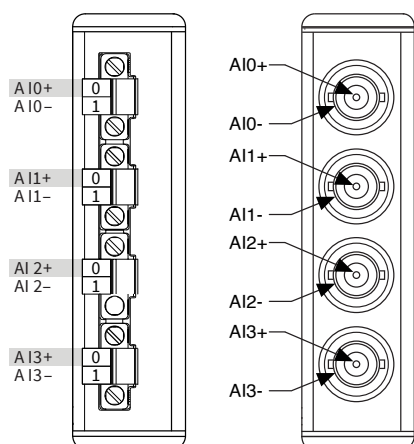
The NI-9222 has more than one connector type: NI-9222 with screw terminal and NI-9222 with BNC. Unless the connector type is specified, NI-9222 refers to all connector types.

NI-9222 Block Diagram



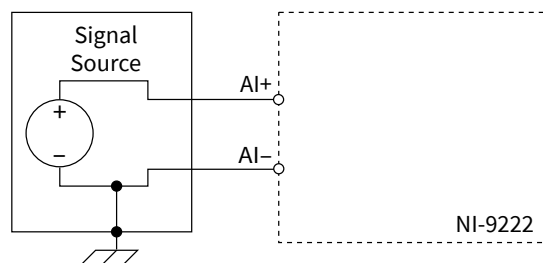
- Input signals on each channel are buffered, conditioned, and then sampled by an ADC.
- Each AI channel provides an independent signal path and ADC, enabling you to sample all channels simultaneously.

NI-9222 Pinout

**Table 1.** Signal Descriptions

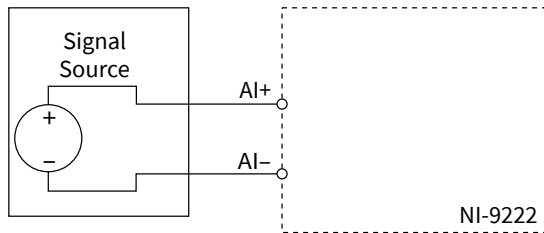
Signal	Description
AI+	Positive analog input signal connection
AI-	Negative analog input signal connection

Grounded Connections



Make sure the voltage on the AI+ and AI- connections are in the channel-to-earth safety voltage range to ensure proper operation.

Floating Connections



NI-9222 Connection Guidelines

- Make sure that devices you connect to the NI-9222 are compatible with the module specifications.
- You must use 2-wire ferrules to create a secure connection when connecting more than one wire to a single terminal on the NI-9222 with screw terminal.

Wiring for High-Vibration Applications

If your application is subject to high vibration, NI recommends that you follow these guidelines to protect connections to the NI-9222 with screw terminal:

- Use ferrules to terminate wires to the detachable connector.
- Use the NI-9971 backshell kit.

Cable Requirements for EMC Compliance

Select and install cables for the NI-9222 with screw terminal in accordance with the following requirements:

- Connect the cable shield to the chassis ground (grounding screw of the chassis) using the shortest length of wire possible.
- Use shielded, twisted-pair cables (Belden 9451 or equivalent).

Figure 1. Cable Connections for NI-9222 with screw terminal for EMC Compliance