

Technical Sales

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NI 9229

4-Channel, 24-Bit Analog Input Module

- 250 Vrms channel-to-channel isolation
- 50 kS/s/ch simultaneous inputs
- Antialias filter
- ±60 V input range
- Dynamic range of 128 dB



Overview

The National Instruments 9229 is a 4-channel, 24-bit C Series analog input module for use in any NI CompactDAQ or CompactRIO chassis. The NI 9229, designed to be both high-speed and accurate, is an effective general-purpose analog module because of its resolution, sample rate, and input range.

With channel-to-channel isolation, your entire system, including the device under test, is protected from harmful voltage spikes up to the isolation rating. In addition to safety, isolation eliminates measurement errors caused by ground loops because the front end of the module is floating.

The NI 9229 uses four of the 2-position screw-terminal connectors. The module includes all four connectors, and you can order more as replacements or for easy test equipment changes among devices under test. Those connectors are listed as model NI 9976.

Strain-relief backshells for signal wire security and high-voltage protection (qty 4): NI 9971

Extra connectors for 2-position connector modules (qty 10): NI 9976

Specifications

Specifications Documents

- Specifications
- Data Sheet

Specifications Summary

| General | |
|----------------|-------------------------|
| Product Name | NI 9229 |
| Product Family | Industrial I/O |
| Form Factor | CompactRIO , CompactDAQ |

| Part Number | 779785-01 | |
|--------------------------------|------------------------------------|--|
| Operating System/Target | Real-Time , Windows | |
| Measurement Type | Voltage | |
| Isolation Type | Ch-Ch Isolation | |
| RoHS Compliant | Yes | |
| Signal Conditioning | Anti-aliasing filter | |
| Analog Input | | |
| Channels | 4,0 | |
| Single-Ended Channels | 0 | |
| Differential Channels | 4 | |
| Resolution | 24 bits | |
| Sample Rate | 50 kS/s | |
| Max Voltage | 60 V | |
| Maximum Voltage Range | -60 V , 60 V | |
| Maximum Voltage Range Accuracy | 0.11 V | |
| Minimum Voltage Range | -60 V , 60 V | |
| Minimum Voltage Range Accuracy | 0.11 V | |
| Simultaneous Sampling | Yes | |
| Analog Output | | |
| Channels | 0 | |
| Digital I/O | | |
| Bidirectional Channels | 0 | |
| Input-Only Channels | 0 | |
| Output-Only Channels | 0 | |
| Counter/Timers | | |
| Counters | 0 | |
| Physical Specifications | | |
| Length | 9 cm | |
| Width | 2.3 cm | |
| I/O Connector | MINI-COMBICON, 3.5 mm (2-Position) | |
| Minimum Operating Temperature | -40 °C | |
| | | |

| Maximum Operating Temperature | 70 °C |
|-----------------------------------|--------|
| Minimum Storage Temperature | -40 °C |
| Maximum Storage Temperature | 85 °C |
| Timing/Triggering/Synchronization | |
| Triggers cDAQ Chassis | No |

Pricing

NI 9229 Packages

To use the NI 9229 , you need all items in the diagram below. Select Option 1 if you already own a C Series System, or Option 2 if you do not already own a chassis, controller, or software.

Roll over the icons below to learn why you need each item in the system

C Series System

| NI 9229 | Chassis | PC/Controller | Software |
|--|---------|----------------|---------------|
| Option 1: NI 9229 and Acce Option 2: C Series System NI 9229 | | | |
| Screw Terminal Connectivity 779785-01 | Qty | | \$ 1,470 each |
| BNC Connectivity 780180-01 | Qty | 0 | \$ 1,470 each |
| | | | |
| Optional Accessories Hide | | | |
| NI 9971 Backshell for 2-pos connector block (qty 4) - 196375-01 | Qty | | \$ 35 each |
| NI 9976 2-pos screw term connector block (qty 10) - 196739-01 | Qty | | \$ 35 each |
| Compliant Calibration for NI Distributed I/O - 960460-03 | Qty | | \$ 310 each |
| Estimated Shipping Days: 9 - 14 Package Price: \$ 1,505 | 4 | | |
| | | Add to Cart >> | |
| Request Quote | | | |
| | | Save for Later | |

Select a Platform and Configure a System

Create a complete system with the NI 9229 and its accessories. However, the NI 9229 is compatible with multiple C Series Platforms, NI CompactDAQ and CompactRIO. Please review the comparison information below and select a platform to begin configuring your system.

Configure System Configure System

NI CompactDAQ

CompactRIO



Mixed-Measurements

Customizable with a variety of chassis and module types.
Learn more

Deterministic & Rugged

Time-Critical Control & Monitoring Learn more

| Features | NI CompactDAQ | CompactRIO |
|-----------------------|--|--|
| Bus | USB, Wi-Fi, Ethernet | Ethernet |
| Operating Temperature | -20 to 50 C | -40 to 70 C |
| Programming Languages | LabVIEW, C, C++, VB.NET, C#.NET | LabVIEW, LabVIEW RT, LabVIEW FPGA only |
| System Control | PC Based | Headless Embedded Controller (Standalone or network) |
| Ruggedness | Laboratory - 30 g shock and 0.3 grms operational vibration | Field Work - 50 g shock (Class I, Div 2 for Hazardous Locations) |

The chassis provides rugged, modular housing for your controller (if using CompactRIO) and C Series modules. A high-performance backplane in the chassis contains the system's data, timing, and triggering buses.

The controller runs your application and interfaces with your C Series modules. If you are using the NI CompactDAQ platform, then a Personal Computer (PC) will act as the controller of your system. However, if the CompactRIO platform is used then an embedded real-time controller will be used instead.

You need software to interface with your hardware and to collect, analyze, present, and store your measurements. This device is compatible with a different programming languages depending on the platform used. If you are using the NI CompactDAQ platform then this device is compatible with LabVIEW, C/C++, Visual Basic, and .NET. However, if the CompactRIO platform is used then this device requires the LabVIEW FPGA Module (sold separately), the LabVIEW Real-Time Module (sold separately) and NI-RIO driver software (included with the hardware).

You have selected **Egypt** as the country where you will use the product(s) (change).

Services

System Assurance Programs

Reduce your setup time and total cost of ownership, and get a system you can use out of the box with National Instruments system assurance programs. System assurance programs include:

- · Installation and integration test of all individual hardware
- · Courtesy installation of system driver sets and application development environments
- · Extended warranty and calibration coverage for up to five years
- · Custom documentation plus a custom restore and startup utility

This service is only available for PXI, NI CompactRIO, and NI Compact FieldPoint systems.

- · Learn More about System Configuration and Deployment Services [http://www.ni.com/services/configuration.htm]
- Customize Your CompactRIO System [http://ohm.ni.com/advisors/crio]
- Customize Your Compact FieldPoint System [http://ohm.ni.com/advisors/cfp]
- Customize Your PXI System [http://ohm.ni.com/advisors/pxi]
- Talk to an Expert about Custom System Configurations [javascript:openCallMeWindowCTA(document.referrer, %20'US')]

Extended Warranties

National Instruments designs and manufactures all products to minimize failures, however unexpected failures can still occur. Extended warranties provide a fixed economical price at the time of system purchase, covering any repair costs for up to three years. In addition, they offer the following benefits:

- · Significant cost savings compared to individual repair incidents
- · Fault location, diagnostics, and repair by NI any time the system product fails
- All parts and labor costs covered as well as any adjustments needed to restore the hardware to manufacturing specifications For more information about your warranty options:
 - Learn More about Warranty Services [http://www.ni.com/services/warranty.htm]
 - Talk to an Expert about Extended Warranties [javascript:openCallMeWindowCTA(document.referrer, %20'US')]
 - View Warranty Repair Policies [http://www.ni.com/services/warranty_repair_policies.htm]

Calibration

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. NI provides manual calibration procedures, services to recalibrate your products, and automated calibration software to calibrate many NI measurement products.

• Learn More about Calibration Services [http://www.ni.com/services/calibration.htm]

Training

NI training is the fastest, most certain route to productivity with NI tools and successful application development.

- · Learn More about NI Training and Certification [http://www.ni.com/training/]
- Find a Course Near You and View Schedules [http://sine.ni.com/apps/utf8/nisv.custed]

Repair Services

Return your registered product under warranty at no additional labor and parts cost. NI offers fault location, diagnostics, and repair any time the system fails as well as any adjustments needed to restore the hardware to manufacturing specifications.

- Learn More about Repair Services [http://www.ni.com/services/warranty.htm]
- Contact NI to Obtain a Return Material Authorization (RMA) Form and Shipping Instructions
 [http://sine.ni.com/apps/utf8/nicc.call_me]
- View Your RMA Support Request Status Online [http://www.ni.com/support/servicereq/]
- Register Your Product [http://www.ni.com/register]

Technical Support

ni.com/support [http://www.ni.com/support/]

Resources

Additional Product Information

- · Manuals (9)
- Dimensional Drawings (2)
- Product Certifications (2)

Related Information

- NI CompactDAQ AdvisorCompactRIO Advisor

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