

NI 9149

8-Slot Ethernet RIO Expansion Chassis

- 8-slot Ethernet RIO expansion chassis for NI C Series modules
- Seamlessly add distributed monitoring and control to any Ethernet network
- Directly access C Series I/O from your Windows PC or LabVIEW Real-Time controller
- Integrated Artix-7 FPGA for custom timing, onboard processing, and control
- Industrial ratings: -40 °C to 70 °C operating temperature, 50 g shock, 5 g vibration
- Ethernet over USB connection option for simplified target configuration



Übersicht

The NI 9149 is a rugged, 8-slot expansion chassis that you can use to easily add C Series I/O to any standard 10/100/1000 Ethernet network. You can add this Ethernet reconfigurable I/O (RIO) chassis to a LabVIEW for Windows application or use it as remote expansion I/O on LabVIEW Real-Time systems such as CompactRIO or NI PXI. Just connect it over Ethernet and instantly obtain access to C Series I/O in your LabVIEW host program.

The NI 9149 does not require the LabVIEW Real-Time Module for access to C Series I/O in Windows-based systems.

For low-level access to I/O timing, triggering, and onboard processing, you can use the LabVIEW FPGA Module to program the Artix-7 FPGA without having any prior experience in FPGA digital design. This FPGA provides reliable high-speed I/O, highly customizable timing, and advanced processing algorithms for your high-speed control applications. If you want to access your I/O only through the RIO Scan Interface, you do not need to use the LabVIEW FPGA Module.

The NI 9149 offers diagnostic and autoconfiguration features to simplify installation, use, and maintenance. For increased reliability, the chassis also has a network fail-safe that verifies network connectivity and communication with the remote host system and drives I/O to safe states should connectivity be interrupted. The NI 9149 features low-power consumption, quick startup times, a wide temperature range (-40 °C to 70 °C), and rugged industrial specs (50 g shock, 5 g vibration).

With the NI 9149, you can easily connect to a host computer using a USB connection. The USB device port is intended for use in device configuration, application deployment, debugging, and maintenance.

Spezifikationen

Spezifikationsdokumente

- Spezifikationen

Überblick über Spezifikationen

Allgemein

Anzahl von Steckplätzen	8
Betriebssystem / Zielsystem	Echtzeit Windows
Unterstützung von LabVIEW Real-Time	Ja

LabVIEW RT Support

National Instruments LabVIEW with the LabVIEW Real-Time Module can be integrated with supported hardware to deliver deterministic, real-time performance for data acquisition and control systems. Using LabVIEW graphical programming, a LabVIEW Real-Time embedded control application can be developed on a desktop machine, and then downloaded and executed on an independent hardware target.

Betriebsspannung

Spannungsversorgung

DC

Rekonfigurierbarer FPGA

FPGA

Artix-7

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