

Portable USB-Based DAQ for Thermocouples

NI USB-9211A, NI USB-9211 **NEW!**

- Small, portable devices (12.1 by 8.6 by 2.5 cm)
- 4 channels of 24-bit thermocouple input
- Internal cold-junction sensors
- Compatible with J, K, R, S, T, N, E, and B thermocouple types
- Built-in, removable connectors for easier and more cost-effective connectivity
- 250 V_{rms} channel-to-earth ground isolation
- Plug-and-play connectivity via USB
- Bus-powered

Operating Systems

- Windows 2000/XP
- Mac OS X
- Linux

Recommended Software

- LabVIEW
- LabWindows/CVI
- Measurement Studio

Measurement Services Software (included)¹

- NI-DAQmx driver software
- VI Logger Lite data-logging software

¹Mac OS X and Linux users must download NI-DAQmx Base driver.



Product	Signal Type	Channels (DI)	Input Resolution (bits)	Maximum Sampling Rate (S/s)	Input Range (mV)	Operating System	Driver Software ¹
USB-9211A	Thermocouple	4	24	12	±80	Windows	NI-DAQmx
USB-9211	Thermocouple	4	24	12	±80	Mac OS X and Linux	NI-DAQmx Base

¹For up-to-date information on NI-DAQ, visit ni.com/support/daq/versions.htm.

Table 1. Portable USB DAQ for Thermocouples Selection Guide

Hardware Description

National Instruments USB-9211A and USB-9211 are data acquisition modules with integrated signal conditioning that provide plug-and-play connectivity via USB for faster setup and measurements. They are designed especially for thermocouple measurements with 24 bits of resolution for superior accuracy and built-in sensors for cold-junction compensation. In addition, these modules include 250 V_{rms} channel-to-earth ground isolation for safety, noise immunity and high common-mode voltage range.

Software Description

The NI USB-9211A uses NI-DAQmx high-performance, multithreaded driver software for interactive configuration and data acquisition on Windows OSs. All NI data acquisition devices shipped with NI-DAQmx also include VI Logger Lite, configuration-based data-logging software. The NI USB-9211 for Mac OS X and Linux uses NI-DAQmx Base, a multiplatform driver with a limited NI-DAQmx programming interface. You can use NI-DAQmx Base to develop customized data acquisition applications with National Instruments LabVIEW or C-based development environments. NI-DAQmx Base includes a ready-to-run data logger application that acquires and logs up to four channels of analog data.

Recommended Accessories

The USB-9211A and USB-9211 both have built-in screw-terminal connectivity, so no additional accessories are required.

Common Applications

The USB-9211A and USB-9211 are ideal for a number of applications where small size and portability are essential, such as:

- Portable data logging – log temperature data quickly and easily
- Academic lab use – obtain academic discounts for quantities of five or more. Visit ni.com/academic for details.
- Environmental monitoring – monitor environmental temperature conditions
- Embedded OEM applications
- In-vehicle data acquisition

Information for OEM Customers

For information on special configurations and pricing, please visit ni.com/oem.

Ordering Information

NI USB-9211A¹779436-01
 NI USB-9211²778976-01

¹Windows only.
²Mac OS X and Linux only.

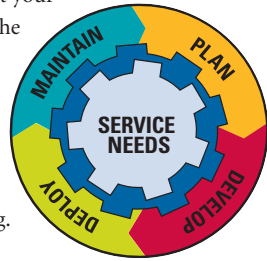
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For complete product specifications, pricing, and accessory information, call (800) 813 3693 (U.S. only) or go to ni.com/oem.



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We also offer service programs that provide automatic upgrades to your application development environment and higher levels of technical support. Visit ni.com/ssp.

Hardware Services

NI Factory Installation Services

NI Factory Installation Services (FIS) is the fastest and easiest way to use your PXI or PXI/SCXI combination systems right out of the box. Trained NI technicians install the software and hardware and configure the system to your specifications. NI extends the standard warranty by one year on hardware components (controllers, chassis, modules) purchased with FIS. To use FIS, simply configure your system online with ni.com/pxiadvisor.

Calibration Services

NI recognizes the need to maintain properly calibrated devices for high-accuracy measurements. We provide manual calibration procedures, services to recalibrate your products, and automated calibration software specifically designed for use by metrology laboratories. Visit ni.com/calibration.

Repair and Extended Warranty

NI provides complete repair services for our products. Express repair and advance replacement services are also available. We offer extended warranties to help you meet project life-cycle requirements. Visit ni.com/services.



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