

# Portable USB-Based DAQ for High Voltages

## NI USB-9221 **NEW!**

- Small, portable device (12.1 by 8.6 by 2.5 cm)
- 8 analog inputs at 12-bit resolution
- $\pm 60$  V input range
- 800 kS/s aggregate sampling rate
- Built-in, removable connectors for easier and more cost-effective connectivity
- 250 V<sub>RMS</sub> channel-to-earth ground isolation
- Plug-and-play connectivity via USB
- Bus-powered

### Operating Systems

- Windows 2000/XP

### Recommended Software

- LabVIEW
- LabWindows/CVI
- Measurement Studio

### Measurement Services Software (included)

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



Product	Signal Type	Channels (SE)	Input Resolution (bits)	Maximum Sampling Rate (kS/s)	Input Range (V)	Connector	Driver Software <sup>1</sup>
USB-9221	Voltage	8	12	800	$\pm 60$	Screw Terminal, D-Sub	NI-DAQmx

<sup>1</sup>For up-to-date information on NI-DAQ, visit [ni.com/support/daq/versions.htm](http://ni.com/support/daq/versions.htm).

Table 1. Portable USB DAQ for High Voltages Selection Guide

## Hardware Description

National Instruments USB-9221 is a data acquisition module with integrated signal conditioning that provides plug-and-play connectivity via USB for faster setup and measurements. This module has eight single-ended analog input channels with an extended input range of  $\pm 60$  V for direct connection to industrial sensors. With a maximum single-channel sampling rate of 800 kS/s, the NI USB-9221 is the fastest device in the USB DAQ with signal conditioning family. In addition, this module includes channel-to-earth ground isolation for safety, noise immunity and high common-mode voltage range. With both screw-terminal and standard D-Sub connector options for this module, you can obtain flexible and low-cost signal wiring.

## Software Description

The USB-9221 uses NI-DAQmx high-performance, multithreaded driver software for interactive configuration and data acquisition on Windows OSs. Use NI-DAQmx to test channels, generate code, and apply custom scaling to any of your measurements. All NI data acquisition devices shipped with NI-DAQmx also include VI Logger Lite configuration-based data-logging software.

## Recommended Accessories

The USB-9221 has built-in screw terminals or a D-Sub connector option that connects to the NI 9934 strain relief accessory, or any other standard 25-pin D-Sub connector.

## Common Applications

The USB-9221 is ideal for high-voltage applications where small size and portability are essential, such as:

- Portable data logging – log voltage data quickly and easily
- Academic lab use – obtain academic discounts for quantities of five or more. Visit [ni.com/academic](http://ni.com/academic) for details.
- Industrial testing – take measurements of high-voltage transformers, batteries, and other electronics
- Embedded OEM applications
- In-vehicle data acquisition

## Information for OEM Customers

For information on special configurations and pricing, please visit [ni.com/oem](http://ni.com/oem).

## Ordering Information

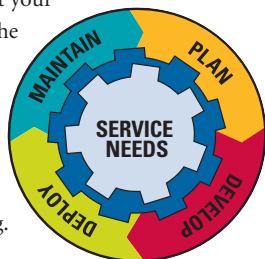
NI USB-9221	
Screw Terminals .....	779439-01
D-Sub Connector.....	779440-01
Accessories	
NI 9934 .....	779104-01

## BUY NOW!

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

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## 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](http://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](http://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](http://ni.com/services).



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