# 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
- ±60 V input range
- 800 kS/s aggregate sampling rate
- Built-in, removable connectors for easier and more costeffective connectivity
- $\bullet$  250  $V_{rms}$  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



	Maximum Sampling Rate							
Product	Signal Type	Channels (SE)	Input Resolution (bits)	(kS/s)	Input Range (V)	Connector	Driver Software <sup>1</sup>	
USB-9221	Voltage	8	12	800	±60	Screw Terminal, D-Sub	NI-DAQmx	
For un-to-date information on NLDAO visit ni com/sunnort/dag/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  $\pm 60~\rm V$  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 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.

# **Ordering Information**

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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.



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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.

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