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NI USB-6008

12-Bit, 10 kS/s Low-Cost Multifunction DAQ

- 8 analog inputs (12-bit, 10 kS/s)
- 2 analog outputs (12-bit, 150 S/s); 12 digital I/O; 32-bit counter
- · Bus-powered for high mobility; built-in signal connectivity
- OEM version available
- Compatible with LabVIEW, LabWindows/CVI, and Measurement Studio for Visual Studio .NET
- NI-DAQmx driver software and NI LabVIEW SignalExpress LE interactive data-logging software



Overview

The National Instruments USB-6008 provides basic data acquisition functionality for applications such as simple data logging, portable measurements, and academic lab experiments. It is affordable for student use, but powerful enough for more sophisticated measurement applications. Use the NI USB-6008 with the included ready-to-run data logger software to begin taking basic measurements in minutes, or program it using LabVIEW or C and the included NI-DAQmx Base measurement services software for a custom measurement system.

To supplement simulation, measurement, and automation theory courses with practical experiments, NI developed a USB-6008 Student Kit that includes a copy of the LabVIEW Student Edition. These kits are exclusively for students, giving them a powerful, low-cost, hands-on learning tool. Visit the NI academic products page for more details.

For faster sampling, more accurate measurements, calibration support, and higher channel count, consider the NI USB-6210 and NI USB-6211 high-performance USB data acquisition devices.

Every USB data acquisition module includes a copy of NI LabVIEW SignalExpress LE so you can quickly acquire, analyze and present data without programming. In addition to LabVIEW SignalExpress, USB data acquisition devices are compatible with the following versions (or later) of NI application software – LabVIEW 7.x, LabWindowsTM/CVI 7.x, or Measurement Studio 7.x. USB data acquisition modules are also compatible with Visual Studio .NET, C/C++, and Visual Basic 6.

Specifications

Specifications Documents

- Specifications (2)
- Data Sheet

Specifications Summary

General	
Product Name	USB-6008
Product Family	Multifunction Data Acquisition
Form Factor	USB

Part Number	779051-01
Operating System/Target	Linux , Mac OS , Pocket PC , Windows
DAQ Product Family	B Series
Measurement Type	Voltage
RoHS Compliant	Yes
Analog Input	
Channels	4 , 8
Single-Ended Channels	8
Differential Channels	4
Resolution	12 bits
Sample Rate	10 kS/s
Throughput (All Channels)	10 kS/s
Max Voltage	10 V
Maximum Voltage Range	-10 V , 10 V
Maximum Voltage Range Accuracy	138 mV
Minimum Voltage Range	-1 V , 1 V
Minimum Voltage Range Accuracy	37.5 mV
Number of Ranges	8
Simultaneous Sampling	No
On-Board Memory	512 B
Analog Output	
Channels	2
Resolution	12 bits
Max Voltage	5 V
Maximum Voltage Range	0 V , 5 V
Maximum Voltage Range Accuracy	7 mV
Minimum Voltage Range	0 V , 5 V
Minimum Voltage Range Accuracy	7 mV
Update Rate	150 S/s

Current Drive Single	5 mA
Current Drive All	10 mA
Digital I/O	
Bidirectional Channels	12
Input-Only Channels	0
Output-Only Channels	0
Timing	Software
Logic Levels	TTL
Input Current Flow	Sinking , Sourcing
Output Current Flow	Sinking , Sourcing
Programmable Input Filters	No
Supports Programmable Power-Up States?	No
Current Drive Single	8.5 mA
Current Drive All	102 mA
Watchdog Timer	No
Supports Handshaking I/O?	No
Supports Pattern I/O?	No
Maximum Input Range	0 V , 5 V
Maximum Output Range	0 V , 5 V
Counter/Timers	
Counters	1
Buffered Operations	No
Debouncing/Glitch Removal	No
GPS Synchronization	No
Maximum Range	0 V , 5 V
Max Source Frequency	5 MHz
Pulse Generation	No
Resolution	32 bits
Timebase Stability	50 ppm

Synchronization Bus (RTSI)	No
Triggering	Digital
Timing/Triggering/Synchronization	
I/O Connector	Screw terminals
Height	2.31 cm
Width	8.18 cm
Length	8.51 cm
Physical Specifications	
Logic Levels	ПΙ

Pricing

NI USB-6008 Complete Package

Each NI USB-6008 requires:

NI USB-6008 Software

Roll over icons above to learn why you need each item in the package.

NI USB-6008 and Accessories

Hardware Subtotal: Ft 47 900

Optional Accessories Hide

USB 6008/09 Accessory Kit - Qty Ft 9 890 each

779371-01

USB 6000 Series Prototyping Qty Ft 9 890 each

Accessory - 779511-01

Software

Software Subtotal: Ft 0

Note: You should only purchase this device without software if you already own compatible application software. [View Full List]

NI LabVIEW Qty Ft 280 900 each

SignalExpress

Development System -

779037-35

Change Software

Learn about all compatible software and get recommendations based on your needs.

Estimated Shipping Days: 1 - 2 Package Price: Ft 47 900

Add to Cart >>

Guarantee your price for 30 days (learn more) Instant Quote

Save for Later

You need software to interface with your hardware and to collect, analyze, present, and store your measurements. This board is compatible with a variety of programming languages, including LabVIEW, C/C++, Visual Basic, and .NET. LabVIEW provides the easiest integration with all of your NI hardware and is recommended to maximize your hardware investment.

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

Resources

Additional Product Information

- · Manuals (5)
- · Dimensional Drawings
- · Product Certifications

Related Information

- NI USB Data Acquisition for OEM
- · Download NI Data Acquisition Drivers
- NI LabVIEW SignalExpress Interactive Data-Logging Software

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