



Technical Sales
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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



Overview

The NI USB-6008 provides basic DAQ 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 USB-6008 with the included ready-to-run data logger software to begin taking basic measurements in minutes, or program it using NI 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 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 counts, consider the NI USB-6210 and NI USB-6211 high-performance USB DAQ devices.

USB DAQ devices are compatible with the following versions (or later) of NI application software: LabVIEW 7.x, LabWindows/CVI 7.x, or Measurement Studio 7.x. USB DAQ modules are also compatible with Visual Studio .NET, C/C++, and Visual Basic 6.0.

The mark LabWindows is used under a license from Microsoft Corporation. Windows is a registered trademark of Microsoft Corporation in the United States and other countries.

Specifications

Specifications Documents

- Specifications (2)
- Data Sheet

Specifications Summary

General

Product Name	USB-6008
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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
Isolation Type	None
RoHS Compliant	Yes
USB Power	Bus-Powered
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

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

Pricing



Prices shown reflect Academic Discounts.

Note: All academic discounts are subject to final verification and approval by National Instruments. Academic discounts are not applicable in Mexico, the Middle East, North Africa, and GCC countries.

NI USB-6008 Complete Package

Each NI USB-6008 requires:

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

NI USB-6008 Software

NI USB-6008 and Accessories

NI USB-6008 - 779051-01	Qty	\$ 189 each
		\$ 170.10 each

Recommended Accessories

Connectivity Accessory - USB 6008/09 Accessory Kit - 779371-01	Qty	\$ 35 each
		\$ 31.50 each

Optional Accessories

USB 6000 Series Prototyping Accessory - 779511-01	Qty	\$ 36 each
		\$ 32.40 each

Hardware Subtotal: \$ 224
\$ 201.60

Software

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

LabVIEW Base	Qty	\$ 999 each
Development System for Windows (English) , 1		\$ 499.50 each

year SSP - 776671-35

Change Software

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

Software Subtotal: \$ 0

Estimated Shipping Days: 5 - 10

Package Price: \$ 224

\$ 201.60

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Resources

Additional Product Information

- Dimensional Drawings
- Product Certifications

Related Information

- NI USB DAQ for OEM
- Download NI DAQ Drivers
- NI SignalExpress Interactive Data-Logging Software