

USB 2.0 interface means extremely easy installation and setup.



Digidata 1550B0, B1 & B4 Data Acquisition - with HumSilencer

Presenting the latest Digidata 1550B digitizer for low-noise experiments. This high-resolution 16-bit data acquisition system is self-contained and communicates with the host computer via a USB 2.0 interface, which means extremely easy installation and setup. Designed for ease-of-use and fast results, the Digidata 1550B comes with versatile AxoScope for Windows software and is ready to take data immediately after installation. Absolutely no programming is necessary.

The Digidata 1550B has a maximum sampling rate of 500 kHz per channel, with an outstanding total data throughput rate of 4 megasamples per second. Both the inherent digitizer noise and channel crosstalk noise are rated at less than ± 1 mV average p-p at 10 kHz, within a ± 10 V input range. The front panel is well laid out with eight analog input channels and eight analog output channels, eight general digital outputs, one dedicated digital output to trigger devices such as oscilloscopes, trigger inputs to start acquisition and to tag data. The back panel has four additional analog instrument telegraph inputs, as well as a DB-25 connector for the digital outputs.

Easy to Use

Designed to support continuous data acquisition within a multitasking operating system, the Digidata 1550B digitizer is fully supported by our AxoScope 10 for Windows and pCLAMP 10 for Windows electrophysiology software.

With its USB 2.0 interface, you can easily connect the Digidata 1550B to a laptop computer without the need for a peripheral PC card.



Specifications

Analog Inputs

- Input channels: 8 single-ended
- ADCs: 8
- Sampling rates**: 1 Hz - 500 kHz
- Resolution: 16-bit
- Input range: -10 to +10 V
- Input resistance: >1 M Ω
- Gain value: 1

**Maximum aggregate throughput rate is 500 kHz x 8 input channels = 4 Megasamples/sec

Analog Outputs

- Channels: 8
- DACs: 8
- Sampling rates: 1 Hz - 500 kHz
- Resolution: 16-bit
- Output range: -10 to +10 V
- Output impedance: < 0.5 Ω
- Output short circuit to signal ground: ± 25 mA

Digital Inputs

- Input type: TTL compatible
- Trigger Inputs
- Input type: TTL compatible
- TAG: rising-edge sensitive
- START: rising-edge sensitive

Digital Outputs

- Number of bits: 8 (of 16) supported in software
- SCOPE: dedicated trigger output
- Output driver: advanced CMOS (AC) compatible
- Output current: ± 4 mA source, ± 32 mA sink

Cable

Type: USB 2.0 braided
Length: 3 meters

AxoScope

AxoScope software is turn-key data acquisition and analysis software for Windows, designed to replace oscilloscopes, chart recorders, and FM tape recorders. AxoScope software provides up to sixteen channels of analog acquisition and four different acquisition modes. Acquire data continuously in Gap-Free mode with simultaneous display, at up to the speed of the digitizer. Set a trigger threshold for the Fixed-Length Events, Variable-Length Events or High-Speed Oscilloscope modes. Tag and add comments to the data in real time. Set analog output holding values. Open Axon-format ABF data files and quickly analyze sections of interest with an array of browsing and basic analysis tools. Preview data and page layout before printing. Additional features include voice tags, which allow tagging of data with spoken comments (requires a microphone and sound card), low-pass and high-pass digital filtering of incoming data, and Store Trace, which freezes a snapshot of a waveform on the screen for comparison with subsequent input.

The Digidata 1550B rack mountable main unit comes standard with:

- USB 2.0 cable
- External auto-switching power supply
- Power cable
- AxoScope 10 software CD
- Printed manual

MDS Analytical Technologies/Axon CNS Ordering Information

Part No.	Product Description
MultiClamp	MultiClamp 700B computer-controlled current & patch clamp amp
Axoclamp	Axoclamp 900A computer-controlled current & voltage clamp
Axopatch	Axopatch 200B-2 capacitor feedback patch clamp amp
SoftPanel	SoftPanel (USB) optional control panel
Digidata 1550B0	Digidata 1550B0 data acquisition system
Digidata 1550B1	Digidata 1550B1 data acquisition system with 1x HumSilencer
Digidata 1550B4	Digidata 1550B4 data acquisition system with 4x HumSilencer
pCLAMP	pCLAMP 10 Standard electrophysiology software (Windows)
pCLAMP Upgd	pCLAMP 10 Upgrade available for previous versions of pCLAMP
Axoprotator	Axoprotator 800A single-cell electroporator
Mo-1-CV-7B	Headstage CV-7B patch clamp (standard) for MultiClamp 700B
Mo-HL-U	Electrode holder for all Universal (U)-type headstages
Mo-HS-9A-x10U	HS-9A headstage for Axoclamp 900A (choose x0.1, x1, x10 U)
	Complete Axon CNS cellular neuroscience product line avail.

U.S./Canada prices shown. International prices add 15%. Email or visit web store for latest prices.