

Easy to Use

Designed to support continuous data acquisition within a multitasking operating system, the Digidata 1440A digitizer is fully supported by our AxoScope 10 for Windows and pCLAMP 10 for Windows electrophysiology software.

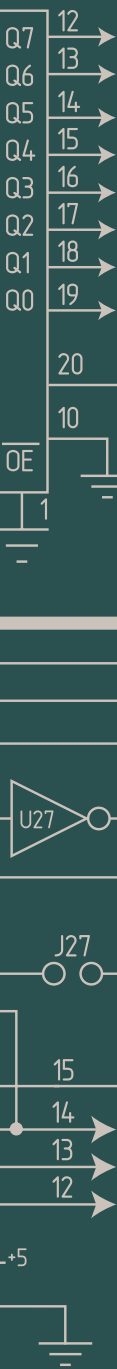
With its USB 2.0 interface, you can easily connect the Digidata 1440A to a laptop computer without the need for a peripheral PC card.

New USB 2.0 interface means extremely easy installation and setup.

**Digidata 1440A Data Acquisition**

Presenting the latest Digidata 1440A 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 1440A comes with versatile AxoScope for Windows software and is ready to take data immediately after installation. Absolutely no programming is necessary.

The Digidata 1440A has a maximum sampling rate of 250 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 sixteen analog input channels and four 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.



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 1440A rack mountable main unit comes standard with:

- USB 2.0 PCI card
- 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	Price
MultiClamp	MultiClamp 700B computer-controlled current & patch clamp amp	\$ 15,215
Axoclamp	Axoclamp 900A computer-controlled current & voltage clamp	\$ 10,166
Axopatch	Axopatch 200B-2 capacitor feedback patch clamp amp	\$ 13,025
SoftPanel	SoftPanel (USB) optional control panel	\$ 1,065
Digidata	Digidata 1440A data acquisition system	\$ 5,694
pCLAMP	pCLAMP 10 Standard electrophysiology software (Windows)	\$ 5,150
pCLAMP Upgd	pCLAMP 10 Upgrade available for previous versions of pCLAMP	\$ 469+
Axoporator	Axoporator 800A single-cell electroporator	\$ 7,060
Mo-1-CV-7B	Headstage CV-7B patch clamp (standard) for MultiClamp 700B	\$ 3,045
Mo-HL-U	Electrode holder for all Universal (U)-type headstages	\$ 185
Mo-HS-9A-X10U	HS-9A headstage for Axoclamp 900A (choose x0.1, x1, x10 U)	\$ 569
	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.

Specifications

Analog Inputs

- Input channels: 16 single-ended
- ADCs: 16
- Sampling rates**: 1 Hz - 250 kHz
- Resolution: 16-bit
- Input range: -10.000 to +10.000 V
- Input resistance: 1 MΩ
- Gain value: 1

**Maximum aggregate throughput rate is 250 kHz x 16 input channels = 4 Megasamples/

Analog Outputs

- Channels: 4
- DACs: 4
- Sampling rates: 1 Hz - 250 kHz
- Resolution: 16-bit
- Output range: -10.000 to +10.000 V
- Output impedance: < 0.1Ω
- 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

