

EVEREST® EV-5000



Mission-Critical Data Acquisition



AstroNova Test & Measurement

Capture Critical Data Accurately & Reliably

Since 1969, AstroNova Test & Measurement has been a pioneer in the data acquisition industry. Building a strong legacy with our high quality, U.S. made products; our customers have come to rely on us for all their data recording needs.

As engineers, we understand the importance of your data capture needs, which is why we design our products with both precision and user experience in mind. Through the years, we have developed a reputation for our accurate, turnkey products and unrivaled technical support engineers, known for providing expert support whenever it is needed.

Our company is committed to innovation and adaptation, ensuring we meet the ever-changing needs of our customers. Our customers know they can look to us for products that offer revolutionary solutions for data acquisition. Whatever our customers' data acquisition needs, we offer the total solution for their tailored applications.



Product Overview

The EV-5000 is ideal for mission-critical data acquisition applications where digital storage and paper printouts are required. Accepting analog inputs, the EV-5000 is engineered to be a direct replacement for the field-proven Everest® series of chart recorders from Astro-Med. Eliminating the need for costly retrofits, the EV-5000 provides the same high quality charts, easy data review and permanent records. The EV-5000 is also able to display real-time data using a waterfall chart on its large touch-screen display while simultaneously recording to high capacity hard drives for offline viewing and post-processing.

The Everest series of chart recorders set the standard for reliability and ease-of-use. Retaining the best features of the original Everest, the EV-5000 allows for greater accuracy, faster data acquisition rates and increased data storage capacity.

Product Highlights

- View real-time data on the 19" touch-screen display
- Easily installs in industry standard 19" racks
- Acquire sensor or telemetry data with 8 single-ended isolated or 16 differential analog inputs
- Secure critical data with removable high capacity hard drive
- Review historical data while recording
- Print recorded data on standard 16.3" (414 mm) Z-fold chart paper
- Synchronize and timestamp acquired data based on IRIG or GPS inputs



Acquire

The Everest EV-5000 provides 8 single-ended isolated or 16 differential analog inputs. These inputs can be sampled at up to 200 kHz per channel with high channel-to-channel and channel to ground isolation. Additionally, individual 16-bit analog-to-digital converters allow for simultaneous sampling of all input channels. The EV-5000 accepts IRIG and GPS inputs for synchronization and timestamping of acquired data.



Visualize

Waveform data is displayed using a waterfall chart on a high resolution 19" touch-screen display. The user interface is customizable with color coding available for easy signal identification and color change for signals that exceed thresholds. Historical data can be viewed without interrupting the current acquisition.



Analyze

Custom filters and increased signal quality can be created with user-programmable digital signal processing. The touch-screen capability allows for instant markings on points of interest and annotation for later review.



Store

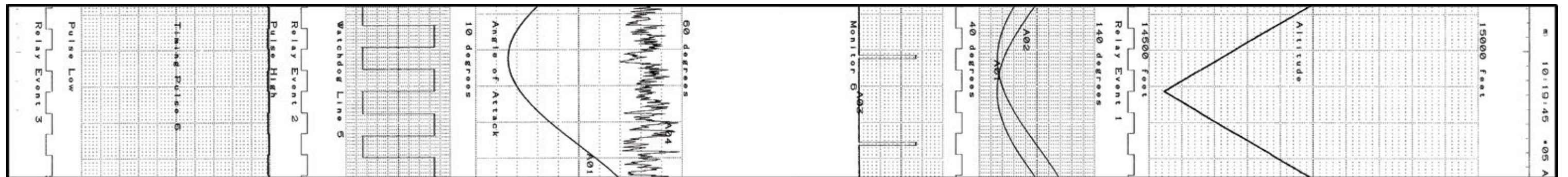
The 500GB removable hard drive is easily accessible from the front of the unit and provides an additional layer of security. Easily exchange hard drives for recording of classified and non-classified data.



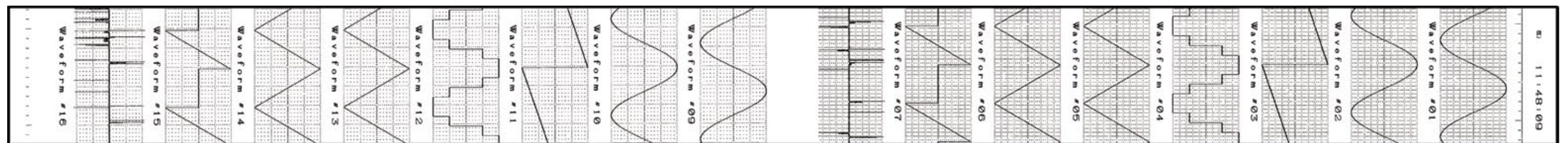
Print

The EV-5000 uses our patented thermal array printing process to provide a highly detailed permanent record of tests. Additionally, EV-5000 paper charts include many features that make it easier to review acquired data:

- Print grids to eliminate paper skew
- Include annotations to highlight important events
- Label individual channels to identify important data
- Adjust trace thickness for readability



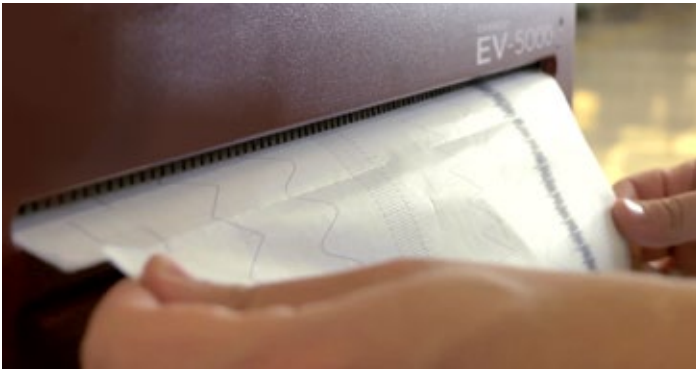
This chart illustrates the flexibility of the chart output. A total of seven waveform channels are shown with annotation showing grid values. Waveforms are overlapped on some grids and event markers are placed on the chart. A unique ID is placed on each waveform for instant identification.



This chart shows sixteen waveform channels with sixteen lines of annotation. Created with the Chart Setup Wizard, it also illustrates the use of the on-demand annotation buffers. The system log prints the time, chart speed and time scale for the chart. Additionally, the tri-level timing marks allow you to quickly make timing measurements.

Everest® EV-5000 System Specifications

Signal Inputs	
Channel configuration options	8 isolated single-ended or 16 non-isolated differential analog inputs
Isolated Single-Ended	
Max. channels	8
Sample rate	200 kHz
Band width	40 kHz (-3dB)
Min. input impedance	>1 MΩ
Input type	DC-coupled
Connector	Shrouded Banana or BNC
Max. rated input	± 250 V
Non-Isolated Differential	
Max. Channel	16
Sample rate	20 kHz
Band width	4 kHz (-3dB)
Min. input impedance	>500 KΩ
Input type	DC-coupled
Connector	D shell
Max. rated input	± 40 V
System & connection	
Power consumption	600W
Operating system	Windows® 10
Connection	Gigabit Ethernet (10/100/1000 Base-T) RJ45 connector USB 3.0



Screen	
Dimensions	19" diagonal
Resolution	1280 x 1024
Printed Charts	
Chart width	16.3" (414 mm)
Resolution	300 dpi (12 dpm)
Printing speed	up to 200 mm/sec
Speed accuracy	+/-2% maximum
Waveform size	170mm max.
Grids	from 2 to 16 individual grids
Time marking tri-level	x1, x10, x100
Environmental Specs	
Temperature	40°F to 105°F (5°C to 40°C)
Operating/Storage Humidity	10% to 90% non condensing
Storage Temperature	-4°F to +105°F (20°C to 60°C)
Compliance Safety	
EN 61010-1:2001, UL61010A-1, CSA C22.2 No.1010.1-92 EMC FCC Part 15, Subpart B, Class A EN61326 Power Harmonics IEC1000-3-2	
AstroNova is system certified to ISO9001	
Physical Specifications	
Dimensions	21" H x 19" W x 18.6" D
Weight	55 lbs. (25 Kg)

To Order	
P/N 42956000	Complete 8-channel system with isolated, single-ended inputs
P/N 42956100	Complete 16-channel system with non-isolated, differential inputs
P/N 41399000	Paper, Pack – (six packs per case)



Supported Throughout Your Equipment’s Lifetime

Technical Support
Our worldwide Field Sales Engineer team is available to visit your facility for one-on-one consultation to review your specific application and recommend the correct set-up for your business needs.

Our dedicated Sales and Support Engineers are ready to answer any questions and provide 24/7 support through our intuitive paging system at our facility in the USA, ensuring a response around the clock. To help you get started, AstroNova includes easy-to-use quick start guides with each system. Onsite start-up assistance is also available upon request.

Repair
If needed, AstroNova is prepared to repair your equipment. Our return process makes repairs quick and simple. Upon arrival of your device, your feedback will be reviewed, device examined and a recommended course of action will be determined. During the repair process, a device can be loaned to keep you up and running.

Upgrade
AstroNova is continuously evolving. By innovating and enhancing devices, we allow you to do more and perform better. In doing so, we give you a chance to be a part of technology evolution and upgrade your equipment. Whether it is hardware or software, we will ensure your devices remain current to meet your ever-changing requirements.

Warranty
AstroNova Test & Measurement equipment is covered by a one-year warranty on all parts and labor. An extended warranty is also available for an additional fee.

Lease
Capital expense budget not available? We have you covered. AstroNova Test & Measurement collaborates with a leasing company allowing you to lease the devices you need to get started now. Get underway with a low down payment and reasonable monthly fee.

Paper Replenishment Program

At AstroNova Test & Measurement, we understand data acquisition systems are a serious investment. As a critical process asset, it must perform without interruption. We ensure continuous operation and complete control of your budget with our Media Replenishment Program. Our team will collaborate with you to define your paper needs. With a strong forecast in hand, you have the option to sign up for 12 months or more and receive paper when you need it. Avoid overspending and overstocking while achieving optimized productivity.

Pre-scheduled or On-Demand Releases
Based on your paper forecast, which can be adjusted at any time, we will pre-schedule or organize on-demand releases.

High-Quality Paper
All AstroNova printing supplies are tested for compatibility and environmental compliance in our state-of-the-art Media Lab. With our extensive 45+ years of expertise in paper materials and coatings, your paper will always print exceptionally clear and is guaranteed to stand the test of time.



AstroNova® Test & Measurement

Why Choose AstroNova Test & Measurement?

Innovative - AstroNova (formerly Astro-Med) has been developing innovative Test & Measurement products since 1969.

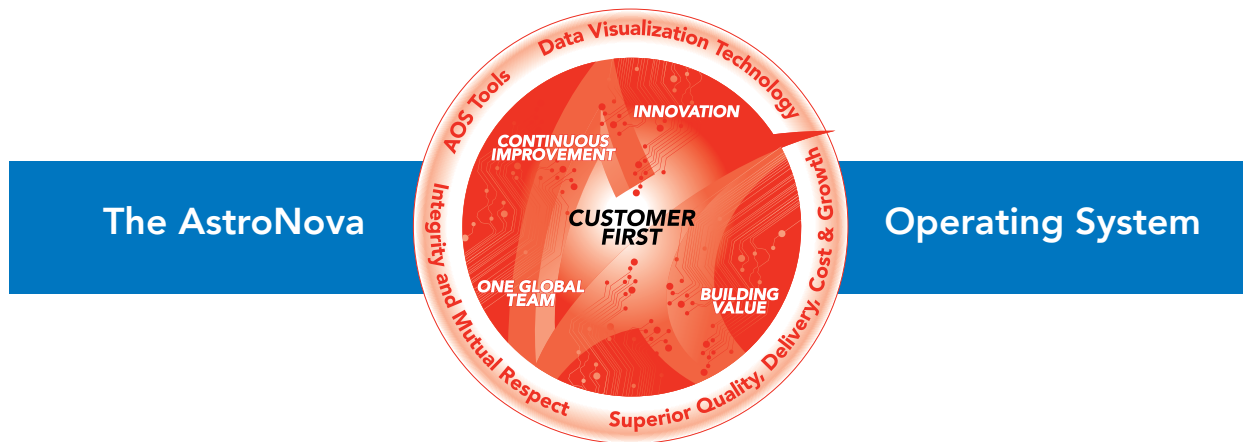
Easy-To-Use - Designed with the user in mind from firmware to software, our all-in-one data acquisition systems are easy to use, saving time and money.

Reliability - Constructed for durability and portability, our products are rugged and ideal for mobile use over time.

Flexibility - Our systems support a wide variety of sensors. Universal input modules reduce the cost of testing by providing the flexibility to connect multiple sensor types to a single module.

Commitment - We value our customers and are committed to providing total satisfaction. Our technical support engineers are located at our facility in the USA and around the world with on-site training and startup assistance is available.

Collaboration - Our approach is partnering with our customers to understand their needs and propose solutions based on their unique challenges.



Other Data Acquisition Products Available from AstroNova



TMX® is an all-in-one data acquisition system providing an unmatched combination of features, ruggedness and ease-of-use. Durable in all environments.



Daxus® DX-100 is an ideal solution for distributed and rugged data acquisition with or without a PC. Multiple units can be stacked or networked for high channel count applications.



Smartcorder® DDX-100 is a compact and portable all-in-one data acquisition system with battery power. Ideal for field testing and troubleshooting.

AstroNova Worldwide Presence

World Headquarters

600 East Greenwich Ave.
West Warwick, RI 02893 USA
Toll-Free: 877-867-9783
Tel: +1-401-828-4000
daq@astronovainc.com
tm.astronovainc.com

China

1F, Bldg2#
458 North Fu Te Road,
Shanghai Waigaoqiao F.T.Z.,
200131
Tel: +86 21 5868 2809
tm.astronovainc.cn

European Headquarters

Waldstrasse 70
63128 Dietzenbach
Deutschland
Tel: +49 (0) 6074-31025-00
tm.astronovainc.de

United Kingdom

A5 Westacott Business Centre
Westacott Way, Maidenhead
Berkshire, SL6 3RT
Tel: +44 (0) 1628 668836
tm.astronovainc.co.uk