

# VOLT101-100MV

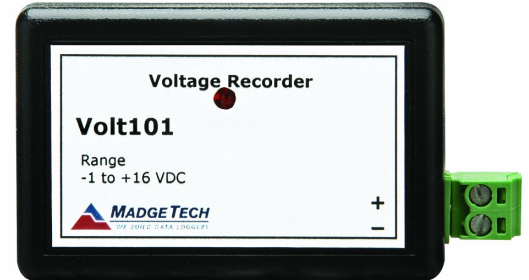
## ±100MV DIFFERENTIAL VOLTAGE RECORDER

### Features

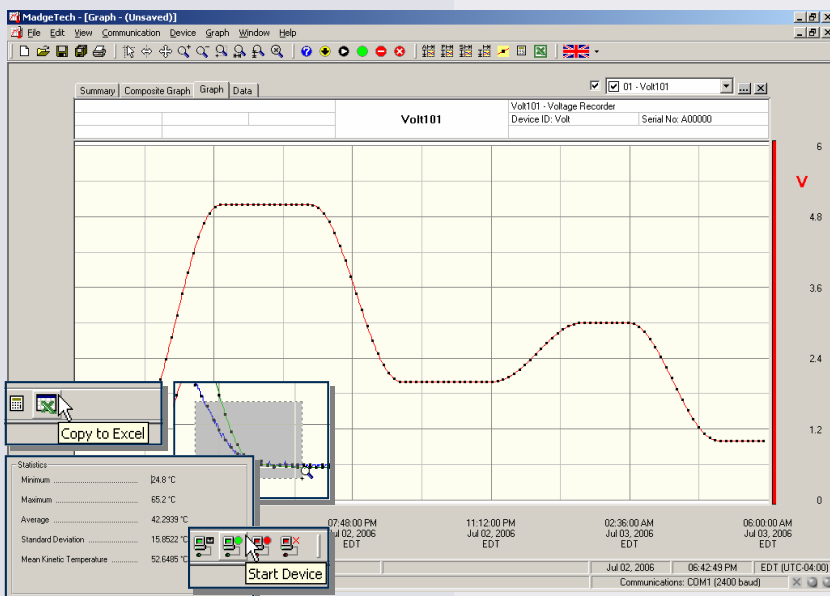
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Miniature size
- User-friendly
- Programmable engineering units
- CE compliant

### Applications

- Low level signal monitoring
- Medical/Pharmaceutical
- Battery studies
- Photovoltaic studies
- Environmental studies
- Current shunts
- Thermopiles
- Replace costly strip chart recorders



The Volt101-100mV is a miniature, battery powered, stand alone voltage recorder. This is an all-in-one compact, portable, easy to use device that will measure and record up to 32,767 measurements. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. The device can be started and stopped directly from your computer and its small size allows it to fit almost anywhere. The Volt101-100mV makes data retrieval quick and easy. Simply plug it into an empty com port and our user-friendly software does the rest.



**MadgeTech Data Recorder Software** displays voltage data in an easy to use graph.

The Windows®-based software package allows the user to effortlessly collect, display and analyze data. A variety of powerful tools allow you to examine, export, and print professional looking data with just a click of the mouse.

Click [MadgeTech Software](#) for more information or to download the software.

## VOLT101-100MV SPECIFICATIONS\*

<b>Input Connection:</b> Removable screw terminal	<b>Memory:</b> 32,767 readings; software configurable memory wrap
<b>Voltage Range:</b> $\pm 100$ mV	<b>Reading Interval:</b> 1 reading every second to 1 every 12 hours
<b>Measurement Range:</b> $\pm 150$ mV	<b>Real Time Recording:</b> May be used with PC to monitor and record data in real time
<b>Voltage Resolution:</b> 5 $\mu$ V	<b>Calibration:</b> Digital calibration through software
<b>Calibrated Accuracy:</b> $\pm 0.01\%$ FSR	<b>Calibration Date:</b> Automatically recorded within device
<b>Input Impedance:</b> $>1k\Omega$ $>1M\Omega$ during acquisition	<b>Power:</b> 3.6V lithium battery included
<b>Analog Conversion Time:</b> 133 ms	<b>User Replaceable Battery:</b> 1 year typical
<b>Frequency Rejection:</b> 60Hz	<b>Data Format:</b> Date and time stamped V, mV, $\mu$ V, engineering units specified through software
<b>Temperature Coefficient:</b> $<25$ ppm/ $^{\circ}$ C; $<10$ ppm/ $^{\circ}$ C typical	<b>Time Accuracy:</b> $\pm 1$ minute/month (at 20 $^{\circ}$ C, RS232 cable not in use)
<b>Overload Protection:</b> $\pm 5.0$ V for 10 seconds	<b>Computer Interface:</b> PC serial or USB (interface cable required); 2,400 baud
<b>Specified Accuracy Range:</b> Nominal range @ 25 $^{\circ}$ C	<b>Software:</b> Windows 95/98/ME/NT/2000/XP based software
<b>Engineering Units:</b> User may define units up to 10 characters in length. This value is stored within the device.	<b>Operating Environment:</b> -40 to +80 $^{\circ}$ C, 0 to 95%RH non-condensing
<b>Scale Factor:</b> User may program any desired scaling factor from $\pm 1.000E-31$ to $\pm 9.999E+31$ . The scaling factor is stored within the device.	<b>Dimensions:</b> 1.4" x 2.5" x 0.6" (36mm x 64mm x 16mm)
<b>Start Time:</b> Software programmable start time and date. Up to six months in advance	<b>Weight:</b> 0.9 oz (24 g)
	<b>Approvals:</b> CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212 $^{\circ}$ F, INCINERATE OR EXPOSE CONTENTS TO WATER.

## SOFTWARE FEATURES

<b>Multiple Graphs:</b> Simultaneously analyze data from several units or deployments; easily switch to a single data series	<b>Statistics:</b> Calculate averages, min, max, standard deviation, and mean kinetic temperature with the touch of a button
<b>Real-Time Recording:</b> Collect and display data in real-time while continuing to log	<b>Export Data:</b> Export data in a variety of common formats, or switch to Excel $^{\circ}$ with a single click
<b>Graphical Cursor:</b> One click displays readings by time, value, parameter or sample number	<b>Calibration:</b> Automatically calculate and store calibration parameters
<b>Data Table:</b> Instantly access tabular view for detailed dates, times, values, and annotations	<b>Logger Configuration:</b> Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
<b>Scaling Options:</b> Autoscale function fits data to the screen, or allows user to manually enter their own values	<b>Communications:</b> Automatically sets up communications port, or lets user select configuration
<b>Formatting Options:</b> Change colors, line styles, plotting options, show or hide channels quickly	<b>Printing:</b> Automatically print graphical or tabular data

\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC WARRANTY AND REMEDY LIMITATIONS APPLY. CALL 1-603-456-2011 OR GO TO WWW.MADGETECH.COM FOR DETAILS.

## ORDERING INFORMATION

Model	Description	Price (U.S.)
VOLT101-100MV	$\pm 100$ mV Differential Voltage Recorder	\$199.00
IFC110	Software, manual and RS232 interface cable	\$99.00
IFC200	Software, manual and USB interface cable	\$119.00
NIST	N.I.S.T. Calibration Certificate	Call for Pricing
LTC-7PN	Replacement battery for Volt101	\$10.00

### ASK ABOUT OUR OTHER DATA RECORDERS

Temperature	Pulse/Event/State
Humidity	Low Level Current
Pressure	Low Level Voltage
pH	RF Transmitters
Level	Intrinsically Safe
Shock	Spectral Vibration

For Quantity Discounts call 603-456-2011 or email [sales@madgetech.com](mailto:sales@madgetech.com)

