

Features

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

Applications

- Low level signal monitoring
- Battery studies
- Power supply monitoring
- Process plants
- Medical/Pharmaceutical
- Research and development
- Environmental studies
- Replace costly strip chart recorders

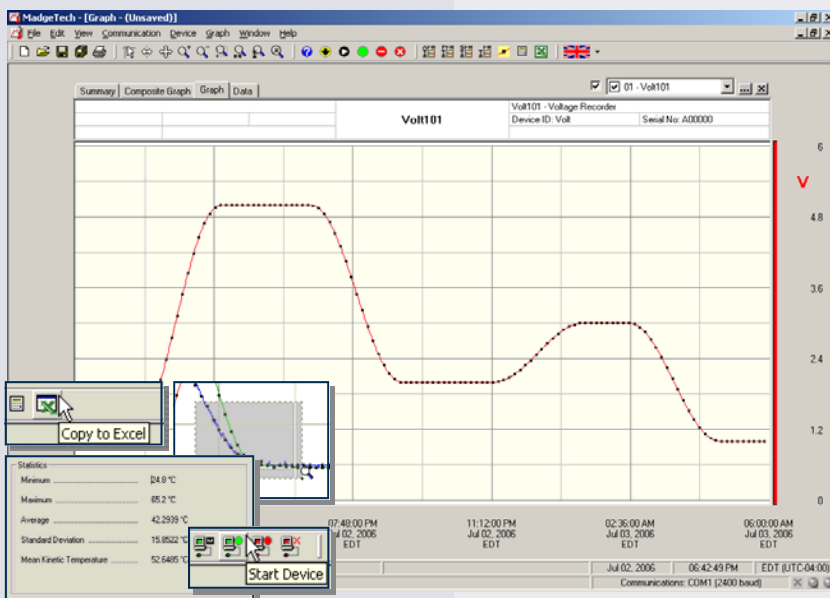


Voltage is one of the most basic, yet useful types of measurement performed today. There are many different types of applications in which knowing a voltage level can provide necessary information used to enhance performance and/or give the user proper control of their equipment.

The Volt101 is geared toward helping users measure and record low-level voltages with high accuracy and resolution. The device records 16 bits of resolution, ideal for accurately measuring battery voltages, sensor monitoring, photovoltaic studies, measuring thermopiles as well as many other common voltage sources.

With user programmable engineering units available inside the device, the user can scale the input voltage to most any type of unit desired such as temperature. This is a unique and very useful feature for presentations.

The Volt101 is available in three different input ranges: 2.5V, 15V and 30V versions.



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 SPECIFICATIONS*

Input Connection:	Removable screw terminal		
Model:	2.5V	15V	30V
Voltage Range:	-0.25 to +2.75	-1.0 to +16.0	-2.0 to +32.0
Voltage Resolution:	0.1 mV	0.5 mV	1.0 mV
Calibrated Accuracy:	±0.01 (%FSR)	±0.10 (%FSR)	±0.10 (%FSR)
Input Impedance:	>1 kΩ**	>10 kΩ	>10 kΩ
Overload Protection:	±5 V	±30 V	± 48 V
Analog Conversion Time:	133 ms		
Frequency Rejection:	60Hz		
Temperature Coefficient:	<25ppm/°C; <10ppm/°C typical		
Specified Accuracy Range:	Nominal range @ 25°C		
Engineering Units:	User may define units up to 10 characters in length. This value is stored within the device.		
Scale Factor:	User may program any desired scaling factor from ±1.000E-31 to ±9.999E+31. The scaling factor is stored within the device.		
Start Modes:	Software programmable immediate start or delay start up to six months in advance		

**Input impedance is greater than 1 MΩ during acquisition for the VOLT101-2.5

Memory:	32,767 readings; software configurable memory wrap
Reading Rate:	1 reading every second to 1 every 12 hours
Real Time Recording:	May be used with PC to monitor and record data in real time
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; user replaceable
Battery Life:	1 year typical
Data Format:	Date and time stamped V, mV, μV, engineering units specified through software
Time Accuracy:	±1 minute/month (at 20°C, RS232 cable not in use)
Computer Interface:	PC serial or USB (interface cable required); 2,400 baud
Software:	XP SP3/Vista/Windows 7
Operating Environment:	-40 to +80°C, 0 to 95%RH non-condensing
Dimensions:	1.4" x 2.5" x 0.6" (36mm x 64mm x 16mm)
Weight:	0.9 oz (24 g)
Materials:	ABS plastic
Approvals:	CE compliant

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212°F, INCINERATE OR EXPOSE CONTENTS TO WATER.

SOFTWARE FEATURES

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

*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

<u>Model</u>	<u>Description</u>	<u>Price (U.S.)</u>
VOLT101-2.5V	±2.5V Voltage Recorder	\$129.00
VOLT101-15V	±15V Voltage Recorder	\$129.00
VOLT101-30V	±30V Voltage Recorder	\$129.00
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
LCD Display	

For Quantity Discounts call 603-456-2011 or email sales@madgetech.com



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VOLT101-100MV

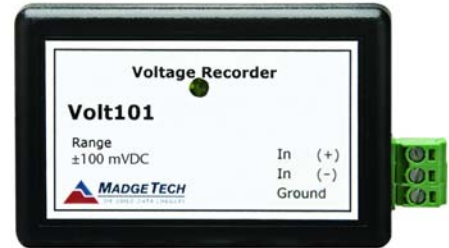
±100MV DIFFERENTIAL VOLTAGE DATA LOGGER

Features

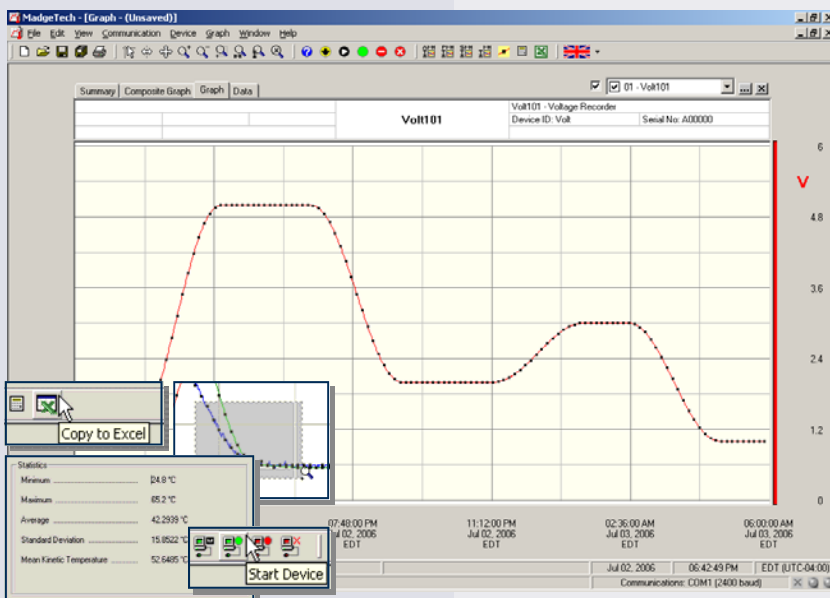
- Real-time operation
- Low cost
- Programmable start time
- Reusable
- Miniature size
- User-friendly
- Programmable engineering units
- CE compliant

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.



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VOLT101-100MV SPECIFICATIONS*

Input Connection: Removable screw terminal	Memory: 32,767 readings; software configurable memory wrap
Voltage Range: ± 100 mV	Reading Rate: 1 reading every second to 1 every 12 hours
Measurement Range: ± 150 mV	Real Time Recording: May be used with PC to monitor and record data in real time
Voltage Resolution: 5 μ V	Calibration: Digital calibration through software
Calibrated Accuracy: $\pm 0.01\%$ FSR	Calibration Date: Automatically recorded within device
Input Impedance: >1k Ω >1M Ω during acquisition	Battery Type: 3.6V lithium battery included; user replaceable
Analog Conversion Time: 133 ms	Battery Life: 1 year typical
Frequency Rejection: 60Hz	Data Format: Date and time stamped V, mV, μ V, engineering units specified through software
Temperature Coefficient: <25ppm/ $^{\circ}$ C; <10ppm/ $^{\circ}$ C typical	Time Accuracy: ± 1 minute/month (at 20 $^{\circ}$ C, RS232 cable not in use)
Overload Protection: ± 5.0 V for 10 seconds	Computer Interface: PC serial or USB (interface cable required); 2,400 baud
Specified Accuracy Range: Nominal range @ 25 $^{\circ}$ C	Software: XP SP3/Vista/Windows 7
Engineering Units: User may define units up to 10 characters in length. This value is stored within the device.	Operating Environment: -40 to +80 $^{\circ}$ C, 0 to 95%RH non-condensing
Scale Factor: User may program any desired scaling factor from ± 1.000 E-31 to ± 9.999 E+31. The scaling factor is stored within the device.	Dimensions: 1.4" x 2.5" x 0.6" (36mm x 64mm x 16mm)
Start Modes: Software programmable immediate start or delay start up to six months in advance	Weight: 0.9 oz (24 g)
	Approvals: CE

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SOFTWARE FEATURES

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

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ORDERING INFORMATION

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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

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Shock	Spectral Vibration
LCD Display	

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