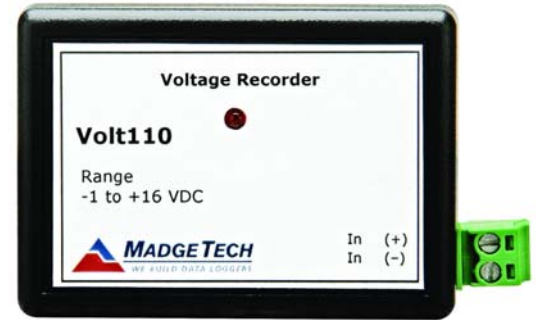


### Features

- Programmable engineering units
- Multiple input ranges available
- Real-time operation
- Programmable start time
- Reusable
- High-speed download
- Programmable memory wrap
- Low cost
- User-friendly
- CE compliant

### Applications

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



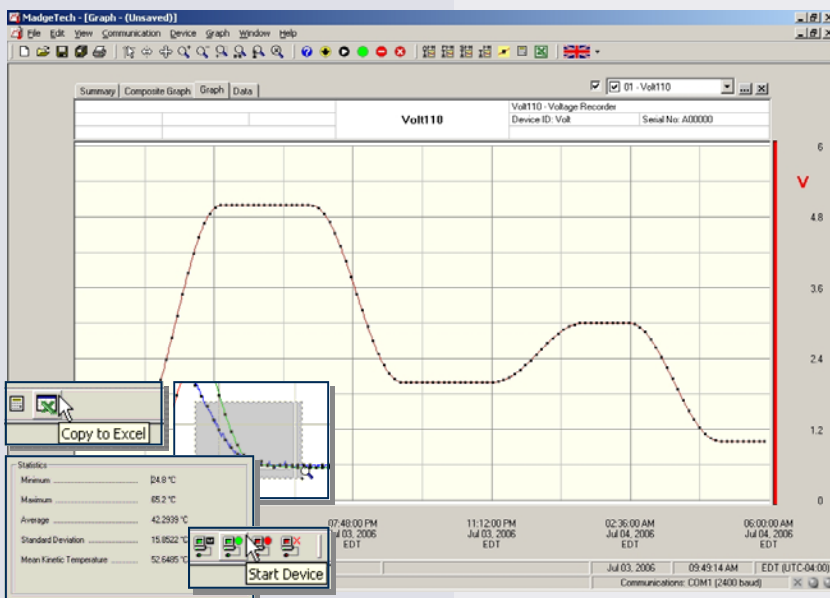
Voltage is one of the most basic, yet useful types of measurement performed today. There are many different types of applications in which knowing a voltage level can provide necessary information used to enhance performance and/or give the user proper control of their equipment.

The Volt110 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 Volt110 is available in three different input ranges: 2.5V, 15V and 30V versions.

Range	±100mVDC	0 to 2.5VDC	0 to 15VDC	0 to 30VDC
Accuracy	±0.01%FSR @ 25°C	±0.01%FSR @ 25°C	±0.10%FSR @ 25°C	±0.10%FSR @ 25°C
Resolution	5µVDC	0.1mVDC	0.5mVDC	1.0mVDC



**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.

## VOLT110 SPECIFICATIONS\*

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

\*\*Input impedance is greater than 1 MΩ during acquisition for the VOLT110-2.5

<b>Memory:</b>	32,767 readings; software configurable memory wrap
<b>Reading Rate:</b>	1 reading every second to 1 every 12 hours
<b>Real Time Recording:</b>	May be used with PC to monitor and record data in real time
<b>Calibration:</b>	Digital calibration through software
<b>Calibration Date:</b>	Automatically recorded within device
<b>Battery Type:</b>	3.6V lithium battery included; <b>user replaceable</b>
<b>Battery Life:</b>	Up to 10 years
<b>Data Format:</b>	Date and time stamped V, mV, μV, engineering units specified through software
<b>Time Accuracy:</b>	±1 minute/month (at 20°C, RS232 cable not in use)
<b>Computer Interface:</b>	PC serial or USB (interface cable required); 57,600 baud
<b>Software:</b>	XP SP3/Vista/Windows 7
<b>Operating Environment:</b>	-40 to +80°C, 0 to 95%RH non-condensing
<b>Dimensions:</b>	1.7" x 2.7" x 0.8" (44mm x 69mm x 21mm)
<b>Weight:</b>	1.1 oz (30 g)
<b>Materials:</b>	ABS plastic
<b>Approvals:</b>	CE

**BATTERY WARNING:** FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT RECHARGE, DISASSEMBLE, HEAT ABOVE 212°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>Graphical Cursor:</b>	One click displays readings by time, value, parameter or sample number	<b>Export Data:</b>	Export data in a variety of common formats, or switch to Excel® with a single click
<b>Data Table:</b>	Instantly access tabular view for detailed dates, times, values, and annotations	<b>Calibration:</b>	Automatically calculate and store calibration parameters
<b>Scaling Options:</b>	Autoscale function fits data to the screen, or allows user to manually enter their own values	<b>Logger Configuration:</b>	Easy set up and launch of data loggers with immediate or delayed start, preferred sample rate, and device ID
<b>Formatting Options:</b>	Change colors, line styles, plotting options, show or hide channels quickly	<b>Communications:</b>	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>
VOLT110-2.5V	±2.5V Voltage Recorder with 10 year battery	\$299.00
VOLT110-15V	±15V Voltage Recorder with 10 year battery	\$299.00
VOLT110-30V	±30V Voltage Recorder with 10 year battery	\$299.00
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 Volt110	\$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](mailto:sales@madgetech.com)

