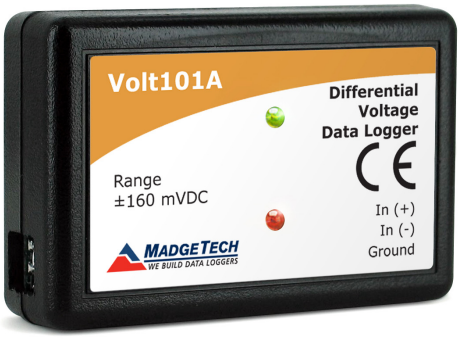
VOLT101A-160MV
DIFFERENTIAL DC VOLTAGE DATA LOGGER

MADGETECH
WE BUILD DATA LOGGERS

Features
- 10 Year Battery Life
- 4 Hz Reading Rate
- Multiple Start/Stop Function
- Ultra High Speed Download
- 2 Million Reading Storage Capacity
- Memory Wrap
- Battery Life Indicator
- Optional Password Protection
- Programmable High and Low Alarms
- NIST Traceable
- Field Upgradeable

Benefits
- Simple Setup and Installation
- Minimal Long-Term Maintenance
- Long-Term Field Deployment

Applications
- Low Level Signal Monitoring
- Battery Studies
- Photovoltaic Studies
- Current Shunts
- General Purpose Voltage Recording



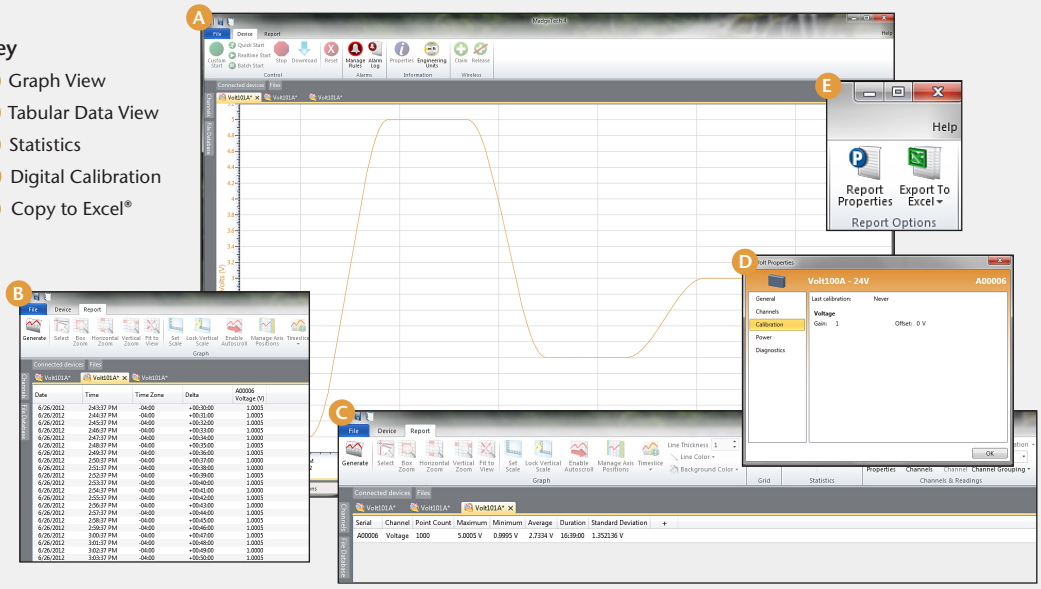
The MadgeTech Volt101A-160mV data logger is a low cost, state-of-the-art data logger for measuring a voltage range of ±160 mV. The range and resolution of this particular data logger makes it ideal for low level signal monitoring, battery studies, current shunts and photovoltaic studies.

The Volt101A-160mV offers a 10 year battery life, up to 4 Hz reading rate, a multiple start/stop function, ultra-high speed data download, 2,064,384 reading storage capacity (optional memory wrap), battery life indicator, optional password protection, programmable high-low alarms and more. The compact size and removable terminal block on the device makes for easy retrieval and reconnection.

Simply use the MadgeTech Data Logger Software to easily configure and download data from the Volt101A-160mV. Graphical, tabular and summary data is provided for analysis and data can be displayed in multiple units, using the Engineering Units function. The data can also be exported to Excel® for further custom reporting and calculations.

MADGETECH DATA LOGGER SOFTWARE

Key
- A Graph View
- B Tabular Data View
- C Statistics
- D Digital Calibration
- E Copy to Excel®

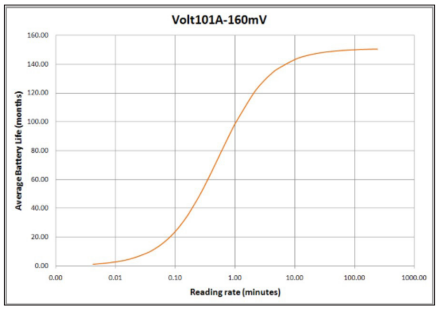


Software Features:
- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/ zoom out
- Lethality equations (F0, PU)
- Mean Kinetic Temperature
- Full time zone support
- Data annotation
- Min./Max./Average lines
- Data table view
- Automatic report generation
- Summary view
- Multilingual

6 Warner Road · Warner, NH 03278
Phone: (603) 456-2011 · Fax: (603) 456-2012

VOLT101A-160MV SPECIFICATIONS*

Input Connection:	Removable screw terminal
Voltage Range:	±160 mV
Voltage Resolution:	5 µV
Calibrated Accuracy:	±0.01 %FSR
Specified Accuracy Range:	Nominal range @ 25 °C
Input Impedance:	>1MΩ
Analog Conversion Time:	150 ms
Frequency Rejection:	50/60Hz
Overload Protection:	±5.0 V for 10 seconds
Reading Rate:	4 readings every second up to 1 reading every 24 hours
Memory:	• 2,064,384 readings; software configurable memory wrap • 330,000 readings in multiple start/stop mode
Wrap Around	Yes
Start Modes:	• Immediate start • Delay start up to 18 months • Multiple pushbutton start/stop
Stop Modes:	• Manual through software • Timed (specific date and time)
Multiple Start/Stop Mode:	Start and stop the device multiple times without having to download data or communicate with a PC
Multiple Start/Stop Mode Activation:	• To start the device: *Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.* • To stop the device: *Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.*
Real Time Recording:	The device may be used with PC to monitor and record data in real time
Alarm:	User selectable high and low limits; blinking LED for alarm and low battery
LED Functionality:	• Green LED blinks: *10 seconds to indicate logging* *15 seconds to indicate delay or manual start mode - standby (waiting to start)* • Red LED blinks: *10 seconds to indicate low battery and/or memory* *1 second to indicate an alarm condition*

Password Protection:	An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.
Engineering Units:	Native measurement units can be scaled to display measurement units of another type. This is useful when monitoring voltage outputs from different types of sensors such as temperature, CO2, flow rate and more.
Calibration:	Digital calibration through software
Calibration Date:	Automatically recorded within device
Battery Type:	3.6V lithium battery included; **user replaceable**
Battery Life:	10 years typical at a 15 minute reading rate  Graph display of the device recording in a 25 °C environment.
Data Format:	Date and time stamped V, mV, µV, engineering units specified through software
Time Accuracy:	±1 minute/month (at 25 °C, stand alone logging)
Computer Interface:	USB (interface cable required); 115,200 baud
Operating System:	XP SP3/Vista/Windows 7/Windows 8 MadgeTech Software 2.03 or higher required
Operating Environment:	-40 °C to +80 °C, 0 %RH to 95 %RH non-condensing
Dimensions:	1.4 in x 2.1 in x 0.6 in (35 mm x 54 mm x 16 mm)
Weight:	0.9 oz (24 g)
Materials:	ABS plastic
Approvals:	CE

BATTERY WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80 °C (176 °F).

**Specifications are subject to change without notice. Specific warranty and remedy limitations apply. Call (603) 456-2011 or go to madgetech.com for details.*

ORDERING INFORMATION

MODEL	DESCRIPTION
VOLT101A-160MV	±160 mV Differential Voltage Data Logger
IFC200	Software, manual and USB interface cable
LTC-7PN	Replacement battery for Volt101A-160mV

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

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