



# **VoltX Series**

4, 8, 12 and 16-Channel Voltage Data Loggers

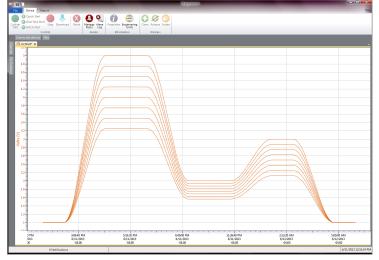


The new VoltX Series consists of 4, 8, 12 and 16-channel, battery powered, DC voltage data logger with a reading rate of up to 4 Hz. Improvements include the elimination of an interface cable (uses standard USB-A to Micro USB), increased memory for more readings and increased download speed.

This easy-to-use device features an 18 month typical battery life, user replaceable battery and programmable engineering units. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. To maximize memory capacity, users can enable or disable channels. For easy identification, each channel can be named with up to a ten digit title.

Using the MadgeTech Software, starting, stopping and downloading from the VoltX Series data loggers are simple and easy. Graphical, tabular and statistical data is provided for analysis and data can be viewed in multiple units, using the Engineering Units function. The data can also be automatically exported to Excel® for further calculations.

### MadgeTech 4 Software Features



Graph View

• Mean Kinetic Temperature

• Full time zone support

Min./Max./Average lines

Data annotation

• Summary view

- Multiple graph overlay
- Statistics
- Digital calibration
- Zoom in/zoom out
- Lethality equations (F0, PU)

Fisgl (28.02 °C)

Cooling Flags



Export to Excel



Tabular Data View



Automation

#### **Features**

- Real-time Operation
- Programmable Engineering Units
- 24-bit Readings Provide High Resolution
- Up to 4 Hz Reading Rate
- Compact
- External Power or User Replaceable Battery
- Pushbutton or Programmable Start Time
- Title Channels
- Calibration Certificate included

#### **Benefits**

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

## Applications

- · Low Level Signal Monitoring
- Medical/Pharmaceutical
- Battery Studies
- Power Supply Monitoring
- Process Plants
- Environmental Studies
- Research and Development
- Replace Costly Strip Chart Recorders

## **SPECIFICATIONS**

Specifications are subject to change without notice. Specific warranty remedy limitations apply.

MEASUREMENT				
Input Connection	Removable screw terminals			
Model	160 mV	3.2 V	32 V	
Voltage Range	±160 mV	±3.2 V	-8 V to +32 V	
Voltage Resolution	0.02 mV	0.0004 mV	0.004 mV	
Calibrated Accuracy	±0.032 mV	±0.0032 V	±0.02 V	
Input Impedance	1 ΜΩ	125 kΩ	125 kΩ	
Maximum Voltage between Inputs and Ground	+3 V	+50 V	+50 V	
Analog Conversion Time	150 ms			
Frequency Rejection	60+50 Hz			
Temperature Coefficient	25 ppm/°C			
Specified Accuracy Range	Nominal range @ 25 °C			
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, CO <sub>2</sub> , flow rate and more.			
GENERAL				
Start Modes	Software programmable immediate start or delay start up to six months in advance			
Real Time Recording	May be used with PC to monitor and record data in real time			
Memory (all channels enabled)	4-channel: 698,709 readings per channel 8-channel: 349,354 readings per channel 12-channel: 232,903 readings per channel 16-channel: 174,677 readings per channel			

LEDs	1 per channel and 2 status LEDs		
Reading Rate	4 Hz up to 1 reading every 24 hours		
Calibration	Digital calibration through software		
Calibration Date	Automatically recorded within device		
Battery Type	9 V lithium battery included, <b>user replaceable</b>		
Battery Life	18 months typical		
Data Format	Date and time stamped V, mV, µV, engineering units specified through software		
Time Accuracy	±1 minute/month		
Computer Interface	USB-A to micro USB cable (included); 460,800 baud		
Operating System Compatibility	Windows XP SP3 or later		
Software Compatibility	Standard Software version 4.2.19.0 or later Secure Software version 4.2.18.0 or later		
Operating Environment	-20 °C to +60 °C (-4 °F to +140 °F), 0 %RH to 95 %RH non-condensing		
Dimensions	4-channel: 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm)  8-channel: 2.70 in x 7.25 in x 1.22 in (65.6 mm x 184.2 mm x 31.0 mm)  12-channel: 2.70 in x 7.25 in x 1.68 in (65.6 mm x 184.2 mm x 42.7 mm)  16-channel: 2.70 in x 7.25 in x 2.14 in (65.6 mm x 184.2 mm x 54.4 mm)		
Material	Black anodized aluminum		
Weight	4-channel: 13 oz (368 g) 8-channel: 13 oz (368 g) 12-channel: 20 oz (580 g) 16-channel: 28 oz (800 g)		
Approvals	CE		

BATTERY WARNING: BATTERY MAY LEAK, FLAME OR EXPLODE IF DISASSEMBLED, SHORTED, CHARGED, CONNECTED TOGETHER, MIXED WITH USED OR OTHER BATTERIES, EXPOSED TO FIRE OR HIGH TEMPERATURE. DISCARD USED BATTERY PROMPTLY. KEEP OUT OF REACH OF CHILDREN.

## Ordering Information

VoltX4-160mV	PN 902179-00	4-Channel ±160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX4-3.2V	PN 902183-00	4-Channel ±3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX4-32V	PN 902187-00	4-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX8-160mV	PN 902180-00	8-Channel ±160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX8-3.2V	PN 902184-00	8-Channel ±3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX8-32V	PN 902188-00	8-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX12-160mV	PN 902181-00	12-Channel ±160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX12-3.2V	PN 902185-00	12-Channel ±3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX12-32V	PN 902189-00	12-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX16-160mV	PN 902182-00	16-Channel ±160 mV Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX16-3.2V	PN 902186-00	16-Channel ±3.2 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
VoltX16-32V	PN 902190-00	16-Channel -8 V to +32 V Voltage Data Logger, USB-A to micro USB cable, universal power adapter
U9VL-J	PN 901804-00	Replacement battery for VoltX Series