Microedge Instruments Inc.

404 – 1688 152nd Street
Surrey, BC
Canada, V4A 4N2
Phone: 604.424.9092

Toll Free: 1.877.352.9158
Fax: 778.807.5098
Email: info@microedgeinstruments.com
Web: www.microedgeinstruments.com

SITE-LOG LPVB-1

Product Specifications

OVERVIEW

The SITE-LOG LPVB-1 (high accuracy) is a 7-channel, battery powered, stand-alone voltage data logger, with storage up to 8 MB of data in non-volatile flash memory. Input voltage signals can be from sensors, transducers, transmitters or any other common voltage sources. Its aluminum enclosure makes it excellent in the harshest industrial environment.

Plug & Play USB port and versatile custom equation simplify communications and engineering unit conversion. 16-bit ADC makes it well suited for science and laboratory applications where precise and accurate measurements are critical.

Simply plug the logger to computer's USB port, and the software automatically recognizes it and handles the configuration, downloading, graph viewing and more…

FEATURES

High Data Resolution:

The 16-bit analog-to-digital converter meets most high-resolution requirements.

Large Memory Size:

The 8-Mega-Byte Memory stores years of measurements.

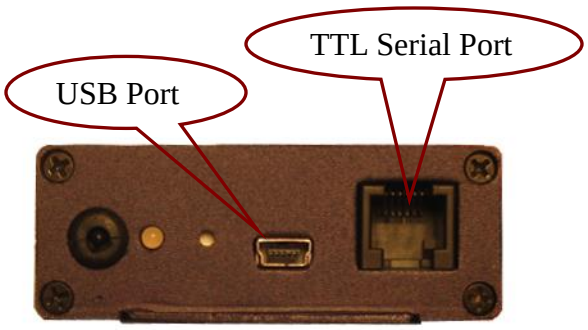
Programmable Input Ranges:

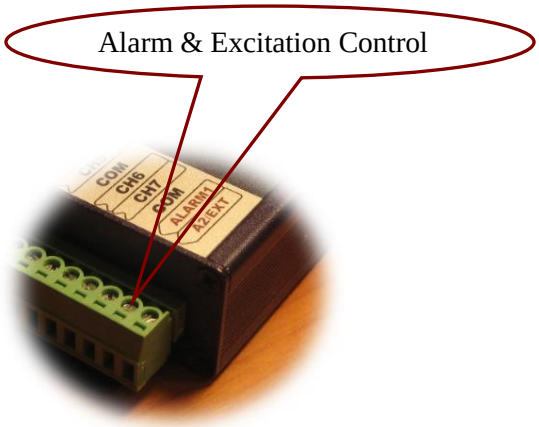
One on-board thermistor channel monitors ambient temperature. Seven range-programmable voltage external input channels cover wide measurement requirements.

Multiple Communication Interfaces:

The SITE-LOG data loggers can be accessed via USB or Ethernet connections with auto baud rate of up to 115 kbps.

Its on-board TTL serial port and USB interfaces meet most communication requirements.





10-Year Battery Life:

The internal lithium battery provides over 10 years of instantaneous logging operation when sampling at an interval of one minute.

Fast Sampling Mode:

The SITE-LOG data loggers can log data with the sampling interval as fast as 20 milliseconds, replacing data acquisition devices.

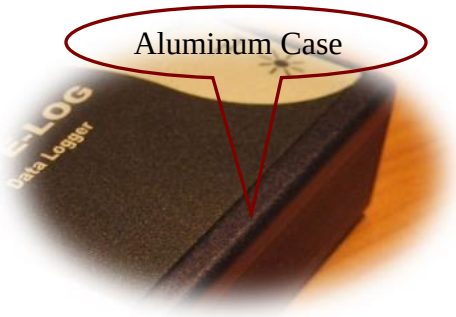
Alarm and Excitation Outputs:

The SITE-LOG data logger notifies the alarm condition over alarm terminal strips or communication lines. (USB, Serial Port)

Excitation control turns on the power of external transmitter/transducer only when the logger is sampling.

Rugged Physical Design:

The rugged aluminum enclosure and coated PCB makes the Site-Log data loggers perfect in the harshest industrial environment.



SITEVIEW SOFTWARE FEATURES

SiteView is a PC based application works with Site-Log Series data loggers for downloading, configuration and data analyzing and plotting.

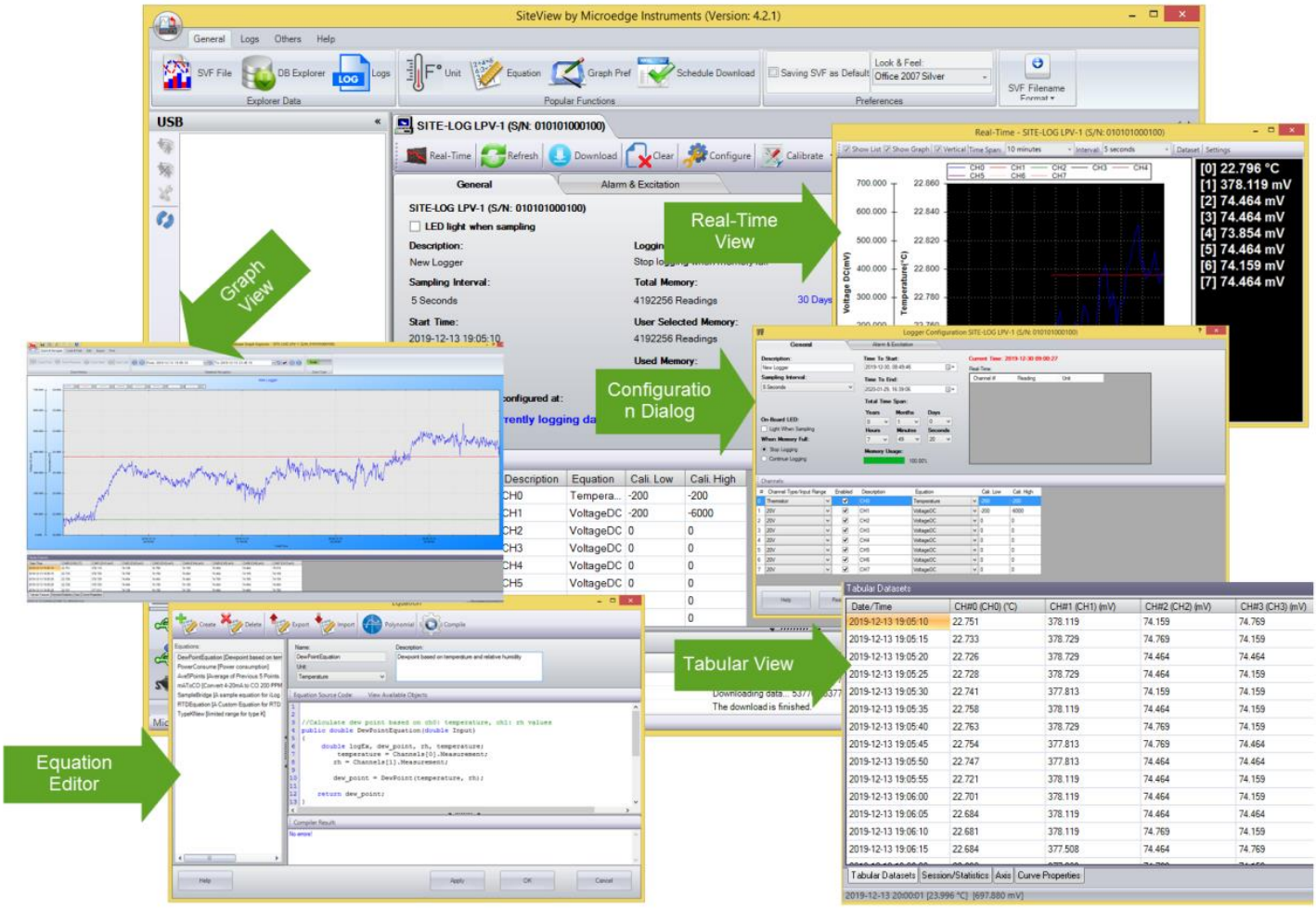
Its user-friendly graphic interface plus powerful functionalities fit both novice and advanced users.

The versatility of custom equation and custom-line equation handle complicated measurement requirements.

Features:

- Support USB, Serial port and Ethernet connections for easy local and remote access
- Fast communication speed up to 115200 bps makes downloading fast
- Real-time view and chart recording replaces chart recording device

- Custom equation and custom-line equation solves scientific and laboratory algorithm difficulties
- Zoom in/zoom out, annotation/label of graph functions provide detailed view of data
- Multiple file loading allows easy data comparison
- Dynamic statistics provides detailed information of current zoomed view
- Export to CSV, TXT, BMP, JPG, TIF, PNG, GIF file formats.



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SPECIFICATIONS

Product Identification	
Product Name	SITE-LOG
Model	LPVB-1
Inputs	
Connections	Pluggable terminal block for seven external channels, excitation controls and alarm outputs.
Channels	One on-board thermistor temperature (-40°C ~ 70°C, -40°F ~ 158°F). Seven external Voltage DC. Software programmable input range selections for each channel: 0 ~ 20 V, -5 ~ 5 V
Resolution	0.0018%
Accuracy	Thermistor channel: +/- 0.2°C(0°C ~ 70°C, 32°F ~ 158°F) For LPVB-1: ± 0.05% FSR @ 25°C for 20V, 10V, 5V channels, ± 0.1% FSR @ 25°C for 2V channel
Input Impedance:	> 1 MOhms
Over-voltage protection	+/- 40 VDC
Alarms	
Channel Alarms	Two editable alarm thresholds per channel.
Alarm Outputs	ALARM1 & A2/EXT terminal strips can be configured as alarm outputs. Alarm-On: MOSFET(N-Channel) switch on. Alarm-Off: MOSFET(N-Channel) switch off. Max Power: 200mA @ 24VDC. With purchase of SiteView software, the Site-Log can report alarm status to host PC via USB, Modem or Ethernet Device Server.
Alarm-On Delay:	Programmable 0 - 10 minutes delay with 1-minute increments.
Alarm Indicator	On-board LED lights in red when in alarm condition.
On-board Memory	
Capacity	8 Megabytes (4 Mega measurements).
Data Retention	Over 20 years.
Sampling and Logging	
Sampling Interval	20 milliseconds to 12 hours user selectable [1]
Logging Mode	Stop recording or FIFO when memory is full.
Logging Activation	Programmable instant, start delay or field push-button activation.
Communications	
Interface	USB(USB cable included). AUX(RJ11) for direct TTL level communications. With purchase of DeviceServer Kit, the Site-Log logger can be connected to Ethernet for remote access.
Baud Rate	Auto-detect baud rate from 2400 to 115200 bps on both USB and AUX ports.
Battery	
Power	Built-in 3.6V Lithium Battery.
Life Cycle	10 years based on 1 minute sampling interval.
Software	
SiteView [2]	Configuration, downloading, plotting, real-time view, custom calibration and custom equation.
Software Requirements	Computer with 1.0 GHz or faster processor 256 MB Memory or higher 1.0 GB of available hard-drive space or higher

	Windows XP with SP2 or later, Vista, Window 7 At least one USB port or one COM port
Physical	
Material	Aluminum enclosure.
PCB Treatment	Conformal coating.
Dimension	88 X 64.2 X 24 mm (3.46 X 2.53 X 0.95 inches)
Weight	200g.
Mounting	Probe/Wall-mount holes for hanging/mounting.
Others	
LED Indicator	Tri-Color LED: (can be disabled for power saving) Normal Sampling: green when sampling Alarm: red when sampling Low Battery: amber when sampling.
Excitation Control	A2/EXT terminal strip can be configured as excitation control output for driving the power of connected devices. Warm-up delay Interval settings: 10 to 240 seconds with 10-second increments.
Operating Environment	-40 ~ +70°C (-40°F ~ 158°F), 0~95%RH non-condensing.
Clock Accuracy	± 1 minute per month.
Approvals	CE, FCC

[1]: Maximum enabled channel: 1 for 20ms interval, 2 for 30ms, 8 for 40ms or bigger interval. External power supply required if the sampling interval is less than one second.
[2]: Sold separately.

LOGGING CAPACITY TABLE

Sampling Interval	Enabled Channel	Logging Capacity	Sampling Interval	Enabled Channel	Logging Capacity
1 minute	1	8 years	1 second	1	48 days
1 minute	2	4 years	1 second	2	24 days
1 minute	8	1 year	1 second	8	6 days
10 seconds	1	485 days	100 ms	1	4 days
10 seconds	2	242 days	100 ms	2	2 days
10 seconds	8	60 days	100 ms	8	14.4 hours