

407 – 15216 North Bluff Road White Rock, BC

Canada V4B 0A7 Phone: 604.424.9092 Toll Free: 1.877.352.9158 Fax: 1.877.453.0658

Email: info@microedgeinstruments.com Web: www.microedgeinstruments.com

iLog Thermocouple Data Logger

Specifications



OVERVIEW

The iLog Thermocouple Data Logger is low cost, high accuracy, battery powered, standalone internal temperature + external thermocouple data logger. The logger records up to 4 mega-byte of data and stores them in non-volatile flash memory for later retrieval.

iLog Thermocouple Data Logger measures wide range of temperatures and works with all types of thermocouples (B, E, J, K, N, R, S, T).

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 4-Mega-Byte Memory stores years of measurements.

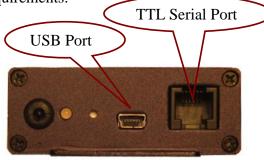
Free Upgrade of Software:

Both firmware and PC software are free for upgrade by couple of mouse clicks, keeping the logger and software always up-to-date with new features and bug fixes.

Multiple Communication Ports:

The iLog data loggers can be accessed via USB, Serial Port, MODEM, 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.



12-Year Battery Life:

The internal lithium battery provides over 12 years of instantaneous logging operation when sampling at an interval of one minute.

Fast Sampling Mode:

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

Alarm and Excitation Output:

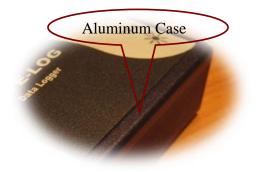
The iLog data logger notifies the alarm condition over alarm terminal strips or communication lines. (USB, Serial Port, MODEM)

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



Rugged Physical Design:

The rugged aluminum enclosure makes the iLog data loggers perfect in the harshest industrial environment.



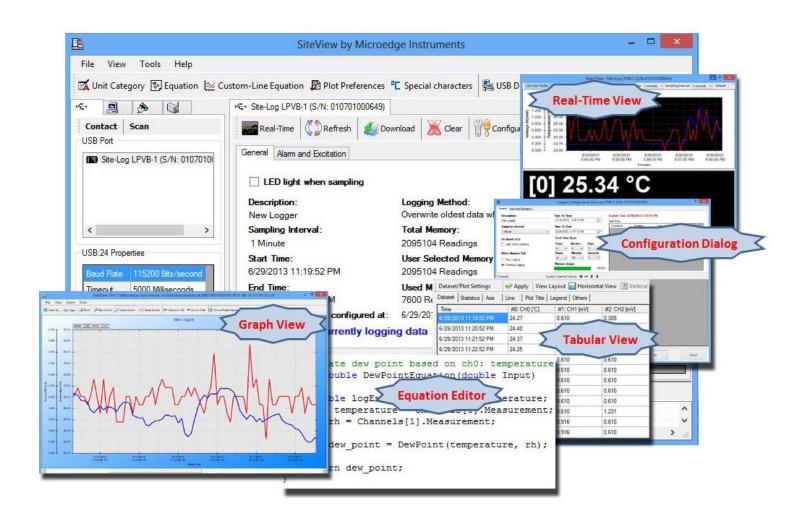
SITEVIEW SOFTWARE FEATURES

SiteView is a Windows-based application which works with iLog Series data loggers for downloading, configuration, data analyzing and plotting.

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

Besides basic data logger configuration, downloading, SiteView includes other powerful features like:

- ❖ Multiple Communications Interfaces: USB, Serial Port, Ethernet...
- Custom Equation Editor with C# language meet any complicated measurement requirements
- ❖ Multiple Data Views and Custom Formatting of Axis, Line, Annotation & Comments.
- ❖ Real-Time Chart View/Recording and User Calibration
- ❖ Export to CSV, TEXT, BMP, JPG, TIF, PNG, GIF file format.



SPECIFICATIONS

Product Identification			
Product Name	iLog Thermocouple Data Logger		
Model	iTC-80		
Inputs	170 00		
Connections	Pluggable terminal block for thermocouple input, alarm and		
	excitation control outputs.		
Channels	One on-board thermistor temperature (-40°C ~ 70°C, -40°F ~		
	158°F)		
	One external thermocouple channel: $(-8mV \sim +73mV)$ for type		
	E,J,K,N T Thermocouple		
Resolution	0.0018%		
Accuracy	Thermistor: ± 0.2 °C(0°C ~ 70°C, 32°F ~ 158°F)		
	Thermocouple: $\pm 0.1\% \sim 0.2\% + T/C$ Accuracy		
Input Impedence	>1 MOhms		
Over-voltage protection	up to -3VDC ~ +40VDC		
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	On court EED rights in red when in didnit condition.		
Capacity	4 Mega bytes (2 Mega measurements).		
Data Retention	Over 20 years.		
Sampling & Logging			
Sampling Interval	20 milliseconds to 12 hours user selectable.		
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 Site USB DeviceServer, 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	12 years based on 1 minute sampling interval		
Software			
Site View (Sold Separately)	Configuration, downloading, plotting, real-time view, custom calibration and custom equation.		

1		
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.	
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	$-40 \sim +70$ °C (-40 °F ~ 158 °F), 0 ~ 95 % RH non-condensing.	
Clock Accuracy	± 1 minute per month.	
Approvals	CE, FCC	

LOGGING CAPACITY TABLE

Sampling Interval	Logging Capacity	Sampling Interval	Logging Capacity
1 minute	727 days	1 second	12 days
10 seconds	121 days	100 ms	28 hours

ORDERING INFORMATION

Model	Description	
iTC-80	iLog Thermocouple Data Logger	