



# Site-Log LRHT-1 / LRHT-2 Data Logger

## **Product Specifications**





#### **OVERVIEW**

The Site-Log LPTH-1 (internal sensor) /LRHT-2 (external sensor) is an 2-channel, battery powered, stand alone data logger. The logger records up to 4 mega-byte of relative humidity, temperature data and stores it in non-volatile flash memory for later retrieval.

Featuring an aluminum enclosure and conformal coating PCB, the Site-Log data logger has excellent performance in the harshest industrial environment.

Powered by Sensirion high performance digital temperature and RH sensor, the LRHT-1/LRHT-2 logger is well suited to science and laboratory applications where precise and accurate measurement is critical.

#### **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.



#### **5-Year Battery Life:**

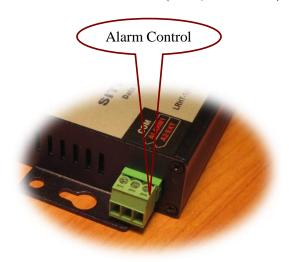
The internal lithium battery provides over 5 years of instantaneous logging operation when sampling at an interval of one minute.

#### **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 Control Output:**

The LRHT-1/LRHT-2 data logger notifies the alarm condition over alarm terminal strips or communication lines. (USB, Serial Port)



#### **Rugged Physical Design:**

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

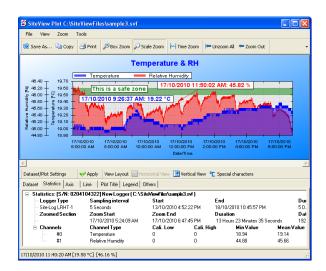


#### **Powerful Software:**

SiteView is a Windows-based application which works with the Site-Log Series data loggers for downloading, configuration, 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.



## **SPECIFICATIONS**

<b>Product Identification</b>				
Product Name	Site-Log			
Model	LRHT-1 (internal sensor), LRHT-2 (external sensor)			
Inputs				
Connections	Pluggable terminal block for alarm1 and alarm2 controls.			
Channels	CH0: Temperature(-40°C ~ 70°C, -40°F ~ 158°F)			
	CH1: Relative Humidity(0 ~ 100% RH)			
Resolution	0.025%			
Accuracy	Temperature: +/- 0.4°C at 25°C			
	Relative Humidity: +/-3% (20% ~ 80% RH)			
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	4 Mega bytes (2 Mega measurements).			
Data Retention	Over 20 years.			
Sampling & Logging				
Sampling Interval	1 second 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 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	5 years based on 1 minute sampling interval.			

Software			
SiteView [1]	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	150g.		
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.		
Operating Environment	$-40 \sim +70^{\circ}\text{C} (-40^{\circ}\text{F} \sim 158^{\circ}\text{F}), 0 \sim 95\% \text{ RH non-condensing}.$		
Clock Accuracy	+/- 1 minute per month.		
Approvals	CE, FCC		

[1]: Sold separately.

## **LOGGING CAPACITY TABLE**

Sampling Interval	Enabled Channel	Logging Capacity	Sampling Interval	Enabled Channel	Logging Capacity
1 minute	1	3.98 years	1 second	1	24 days
1 minute	2	727 days	1 second	2	12 days
1 minute	8	181 days	1 second	8	3 days
10 seconds	1	242 days	100 ms	1	58 hours
10 seconds	2	121 days	100 ms	2	29 hours
10 seconds	8	30 days	100 ms	8	7.2 hours