

# EasyLog® EL-2

WINDOWS™ Compatible Hand Held Data Logger

EL-2 measures, displays, records and controls temperature, humidity, pH, voltage, current, etc., with memory for 8064 readings and a battery life of up to 3 years\*\*. EL-2 can operate as a 'stand alone' logger or be permanently connected to a system. The EL-2 serial link is addressable and up to 8 loggers can be connected to one serial port. The PC software operates under Windows 3.1 and does not require specialist skill to operate. Data output is in text format and can be easily integrated into any popular spreadsheet. Graphical output is possible under EL-WIN. Consult the EasyLog software manual for further details.

- Battery Powered
- Multi-function
- Non-volatile Data Storage
- Hand Held or Surface Mounting
- Easy to Use
- Cold Junction Compensation For Thermocouple Temperature Sensing
- CE



## Windows™ 3.1 Control Software

### Stock Number - EL-WIN

Easy to install and use, the control software will enable the user to control one or more EasyLogs and operate them as a complete system. Supplied on a 3½" disk with a manual and serial link. EL-WIN will run under Windows 95.

## Accessories - Cables

### Stock Number - EasyLink

Extension connector to 'daisy chain' more than one EasyLog. One extension will be needed for each extra logger.

\* Sensor dependent.

\*\* Battery life dependent on input mode and sample rate.

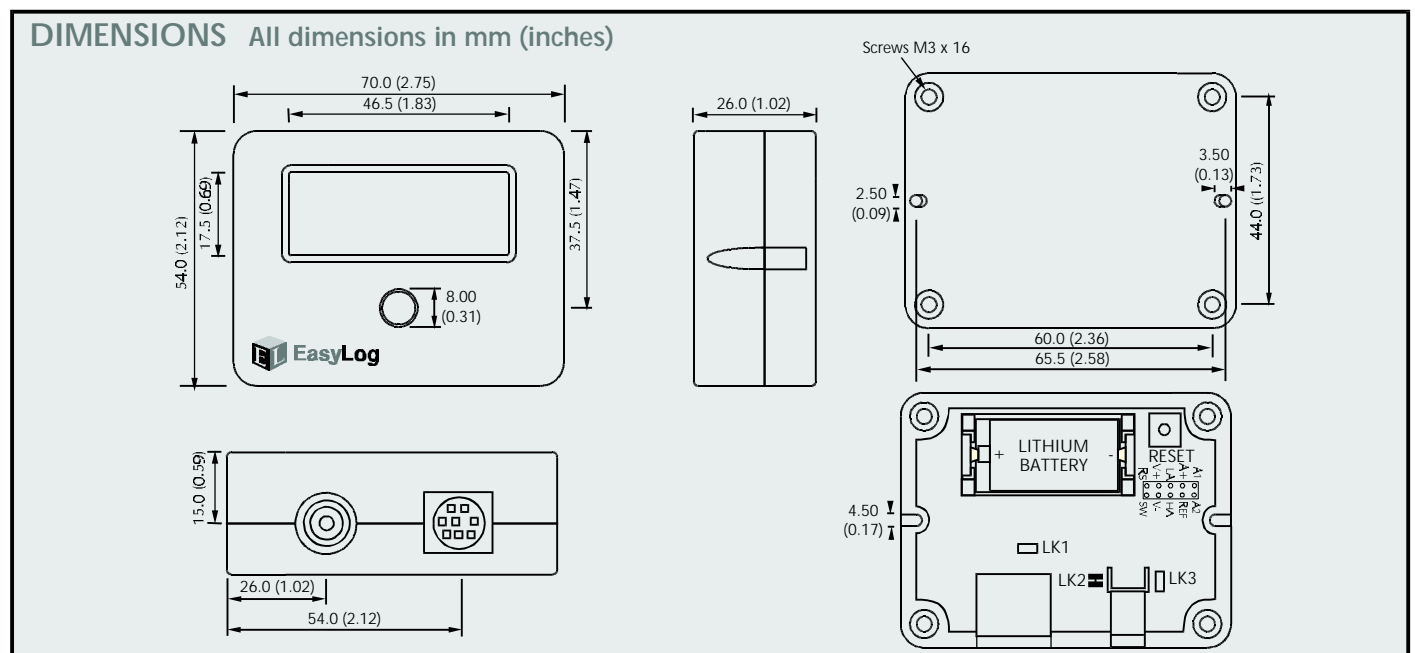
E.g. RateCount, 5secs sample rate:

Battery life is approximately 30 days.

Stock Number		Hand Held Data Logger		EL-2
Specification	Range	Resolution	Accuracy	
Temperature ('K' type thermocouple)	-25 to +200°C	1°C	±1°C	
	-13 to +392°F	1°F	±2°F	
Temperature (internal)	-10 to +50°C	1°C	±1°C	
	+14 to +122°F	1°F	±2°F	
Humidity	5 to 95% RH	1%RH	*	
pH	0 to 14pH	0.1pH*	±0.1pH*	
	0 to 20V D.C.	0.1V	±1%	
Voltage	0 to 2A	0.01A	±1%	
	0 to 255	1 unit	N/A	
Frequency	40 to 400Hz	N/A	±2Hz	
Battery	3.6V ½AA lithium (up to 3 years life)**			
Serial link	8 Pin Mini DIN			
Sensor connection	Phono			
Number of readings	8000			
Logging rate	1 sample per 5 seconds to 1 per 12 hours.			

## CONNECTOR SOURCING GUIDE

METHOD	FARNELL	ELECTROSPEED	RS
Mini DIN	152-210	251-1470E	463-394
Phono	152-422	227-27151K	534-109



## USING EXTERNAL SIGNALS

### PIN FUNCTION

A1, A2, REF	Output for test diagnostics. Donotuse.
HA	High Alarm output = V+ whenalarmed.
SW	'Push to record event'input. Activelow-operatedbyfrontswitch, subject to Push-to-Start.
RS	Resetinput. Active low-operatedbyRESETswitch. NOTE - loggingwillstopandrestartat0time.
LA	Low Alarmoutput = V+ whenalarmed.
A+	Output = V+ whenareadingisinprogress.
V+	Battery positive.
V-	Battery negative.

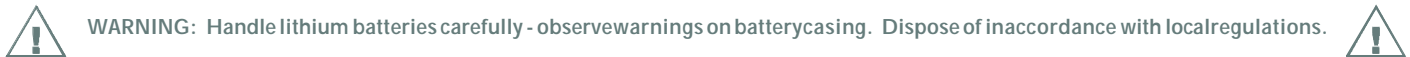


Only connect outputs to high impedance inputs, otherwise performance will beaffected and battery life drastically reduced.

## BATTERY REPLACEMENT

Only use ½AA3.6Vlithium. The list below is not exhaustive. Checkwithsupplier thatthebattery you are ordering is 'press fit' and is not fitted with solder tagsorleads. Take care to connect correctly.

MANUFACTURER	PART NUMBER	MANUFACTURER'S ORDERCODE
MAXELL	ER 3S TC	n/a
SAFT	LS3	n/a
SONNENSCHN	SL-750/S	1107501 100
TADIRAN	½AA/S	1551-02-210-000



## VARIOUS OPERATING MODES

**Pluggable Links (Links 1 & 3)**

SHORTED

OPEN

**On-Board Link (Link 2)**

Normally SHORT  
Cut to OPEN

Normally OPEN  
Solder to SHORT

BLUE "K" type thermocouple  
BROWN

**TEMPERATURE (with thermocouple)**  
 A 'K' type thermocouple can be connected directly to the EL-2. The range should be selected in the EL-WIN software. Ensure Link 3 is OPEN.

**TEMPERATURE (internal)**  
 No plug needed. The EL-2 uses its internal temperature sensor. Ensure Link 3 is SHORTED.  
 Alternatively use a phono plug which has been short circuited.

0-20V D.C.

**VOLTAGE\***  
 D.C. voltage within the ranges of 0-2V or 0-20V can be connected directly to the EL-2. Ensure that the appropriate range has been selected in advance within the EL-WIN software. For higher voltage measurement an external potential divider network should be added.

NOTES  
 1. Check link 3 is open, Link 2 is shorted.

pH PROBE

**pH (with internal reference)**  
 Connect a pH probe that has an internal reference cell directly to the EL-2 (refer to the probe's instruction manual).  
 NOTE - There is no need to open Link 2 if the SENTEK P14 probe is used.

NOTES  
 1. There is no pH annunciator on the LCD.  
 2. Open link 2.

SENSOR

**HUMIDITY**  
 A capacitive humidity sensor can be connected directly to the EasyLog.

NOTES  
 1. There is no RH annunciator on the LCD.  
 2. Sensor range - 200 to 300 pF  
 3. Sensitivity - 0.5 to 1.0pF per %RH  
 4. Check Link 3 is open, Link 2 is shorted.

0-2A D.C.  
1Ω 6watt

**CURRENT\***  
 D.C. current can be measured up to 2A maximum by using an external 1Ω 6watt shunt across the input. Select the voltage '0-2V range' in EL-WIN software and 'A' in the display symbols.

NOTE  
 1. Check Link 3 is open.

0 - 5V

**COUNTING\***  
 A pulsed input of 0-5V can be directly connected to the EL-2. The counter is incremented on the falling edge.

NOTE  
 1. Check Link 3 is open, Link 2 is shorted.

**\*NOTES**

1. When using the serial link, ensure that all signals are isolated from the computer ground.
2. When using several loggers together, ensure that all signals are isolated or use the same ground.