EL-EnviroPad-TC

- ✓ **Stand-alone, battery-powered data logger for a single thermocouple-based measurement.**
- ✓ **-100 to +1400 °C (-148 to 2552 °F) measurement range with high/low alarms**
- ✓ **Supports J-,K-,N- and T-type thermocouples**
- ✓ **Built-in, color, 2.8-inch touch display allows measurement configuration without a connected PC**
- ✓ **Displays real time data, and previous results in table or graphic form**
- ✓ **Built-in, non-volatile flash memory for measurement storage**
- ✓ **Behaves like any USB thumb drive**
- ✓ **Recorded, delimited ASCII text files are accessible by any computer running any operating system**
- ✓ **Built-in real time clock time and date stamps each measured value**
- ✓ **Huge on-board memory capacity: >65,000 samples in each of 100 files**
- ✓ **Supports both single-shot and long-term data logging modes**
- ✓ **Built-in USB interface for uploading recorded data to the PC for analysis**
- ✓ **Recorded data files are Excel-compatible**
- ✓ **Built-in, rechargeable Li-polymer battery**

EL-EnviroPad-TC Description

Model EL-EnviroPad-TC is a temperature measurement instrument designed to work with a connected thermocouple. It integrates a touch-sensitive display, rechargeable battery, and a huge non-volatile memory to offer a truly portable temperature measurement instrument for a variety of manual and automatic measurements. The EL-EnviroPad unit easily fits in the palm of your hand, and the supplied K-type thermocouple probe tethers to it using a coiled lead wire that can easily stretch over 4 feet (1.2 meters) from probe tip to connector.

EL-EnviroPad-TC allows two temperature measurement modes:

- Spot checks where a single temperature measurement is acquired and recorded to flash memory with the date and time of acquisition.

- Long-term data logging where the instrument is configured to acquire temperature data at one of six programmable sampling intervals ranging from once per second to once every 12 hours. Like the spot check mode, time and date information is logged to flash memory with every temperature measurement.

Both data logger and spot check modes display minimum and maximum values acquired during any given session. The data logger mode allows programmable high and low temperature limits. When an enabled limit is breached, the EL-EnviroPad will sound an audible alarm and its real time display flashes red. The audible alarm will persist, even after measured temperatures return to normal levels, until a virtual button is pressed to reset it. Pressing another virtual button mutes the audible alarm. Recorded measurements display in real time, and their background color changes to indicate alarm states. A grey background color indicates readings within defined limits, while values that breach the upper and lower limits display with a red and blue background color respectively. Data logging sessions may begin immediately, or at a programmable date and time in the future.

Finally, data files recorded to the device may be reviewed directly on the EL-EnviroPad display in either a tabular or graphical format with time and date information. A single virtual button push displays summary stats that indicate the number of high and low limit breaches, and absolute minimum and maximum measurement values for the entire file. To support more detailed analysis, EL-EnviroPad-acquired data are stored as delimited text files on the device. These may be accessed as any USB flash memory by simply plugging the EL-EnviroPad into the USB port of any computer running any operating system that can access a USB thumb drive memory device. Popular examples are Windows, Linux, and OS X for Macs. When accessed from a Windows platform, software provided with the EL-EnviroPad allows cursor-based measurement review and instant export to Microsoft Excel®.

EL-EnviroPad-TC Close-up

Standard miniature thermocouple connector

Touch-sensitive color display

Power/wake-up button

Mini-B USB connector

EL-EnviroPad-TC Dimensions

DIMENSIONS
All dimensions in inches (mm)

0.98" (25)

4.21" (107)

0.74" (19)

9.44" (240)

0.11" (3)

2.67" (68)

10:08 28/03/2012

50°C

Max 65°C

Min 25°C

45°C
46°C
44°C
45°C
45°C

Mute   Reset

Stop

Home Display Menu Close-up

Date and time display

Battery status

(Measurement) Initiates a pre-programmed data logging session or a spot check measurement

(View Logs) Reviews previously-acquired data from the EL-EnviroPad's built-in file system.

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Measurement

Data Logging

View Logs

Settings

(Data Logging) Programs a data logging session where data is continuously acquired

(Settings) Configures temperature units (°F or °C), date and time, thermocouple type (J,K,N or T), power saving options, and default log file extension and time and date format.

1. On the home screen choose Data Logging

2. Select Full Set Up

3. Select the desited sample rate and press Next

4. Turn On/Off High/Low Alarms

5. Enter Alarm Level when alarm turned On

6. Choose to start logging immediately or to schedule a data logging session.

On the home screen choose Measurement

If no Data Logging Session running (spot check mode)...

If Data Logging Session is running (data logging mode)...

Current Reading (real-time)

Min and Max Readings

Latest Recorded Readings

Save current Reading (spot check)

Stop recording session

Save Readings to file

1. On the home screen choose View Logs

2. Select the file to examine.

3. Scroll through samples using the arrows.

4. Select Graph button to view graphical representation of data.
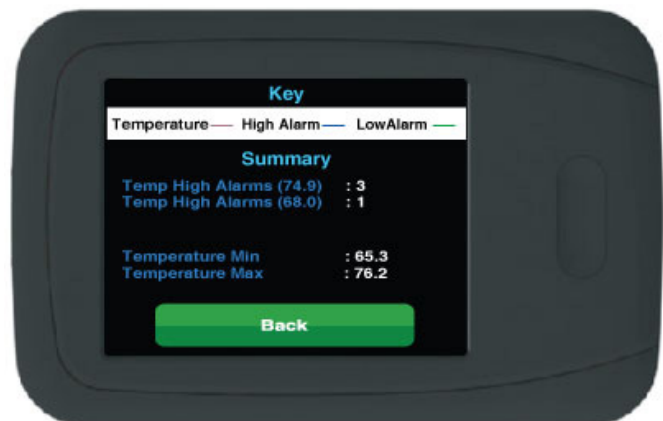
5. The Summary button provides a Graph key and other information.

Connect the EL-EnviroPad to your PC using the USB cable. Note that any PC and operating system capable of using a USB jump dive can be used. The following examples use the Windows operating system.
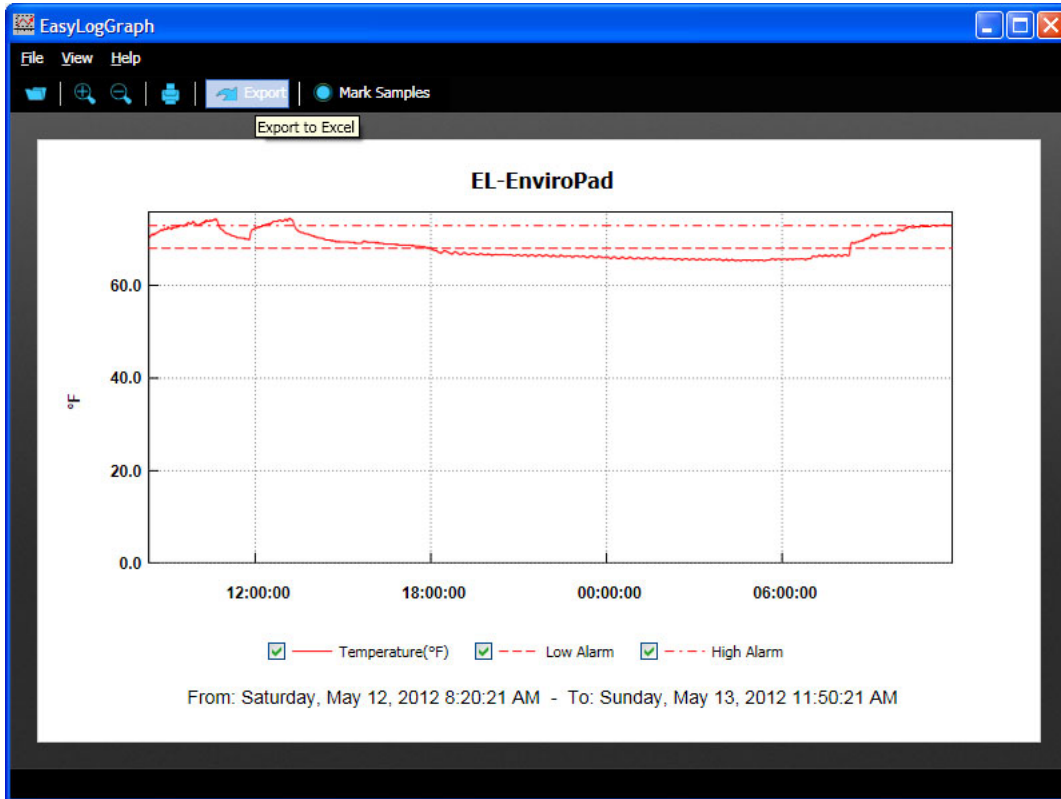
Battery charging

Your PC will connect in Windows Explorer
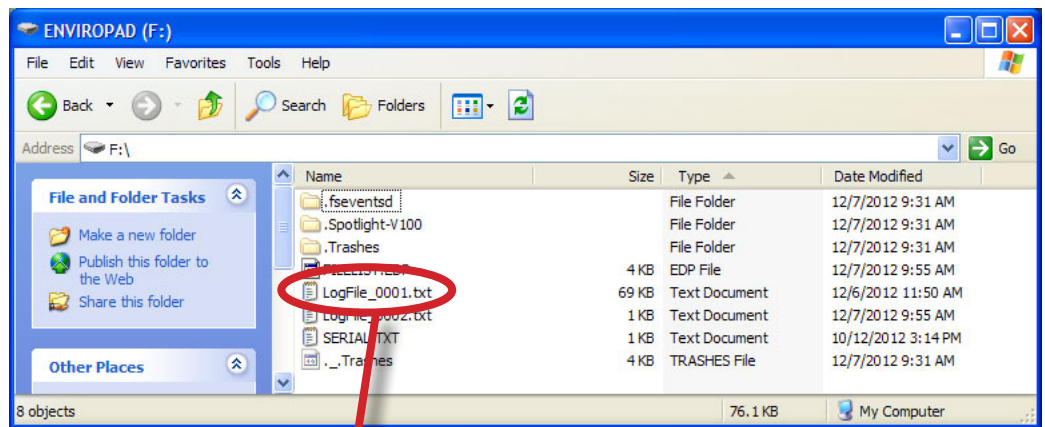
Double-click on a file name to view raw data.
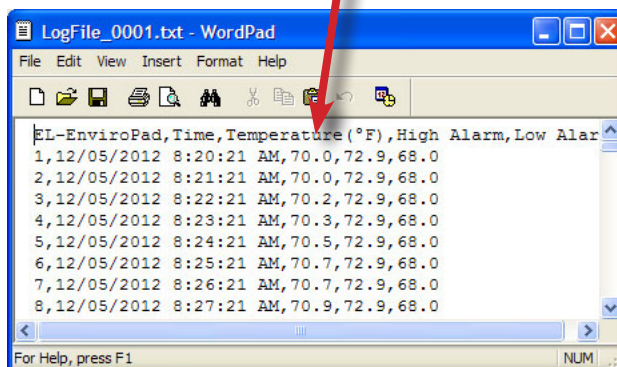
Open with EasyLogGraph sofware for Windows to view Graph. Click the Export button to export data to Excel.

Manipulate and perform calculations on data imported to Excel.

Specifications

Specification	Minimum	Typical	Maximum	Unit
USB supply voltage	4.5V	-	5.5V	V D.C.
Internal Resolution	-	0.1	-	°C
Data recording capacity (per recording)	-	-	65536	readings
Hand unit operating temperature range***	0 (+32)	-	+50 (+122)	°C (°F)
Operating time (on a single charge)	8	24*	**	hours
Displayable temperature (dependant on probe)	-100 (-148)		+1400 (+2552)	°C (°F)
Storage capacity	-	-	100	files

* Typical use: 1min recording rate & power-save
** Depends on recording settings
*** WARNING - DO NOT EXCEED OPERATING TEMPERATURES

Ordering Guide

| Description			Order No.
EL-EnviroPad-TC Data logger with K-type TC probe, USB cable, removable shock-absorbing protective boot, EasyLogGraph software for Windows.			EL-EnviroPad-TC
Optional Accessories			
101085 Power supply adapter (USB to AC).	**101085**	**101017-RPS** Australian Adapter for power supply 101085.	**101017-RPS**
101017-RPE European Adapter for power supply 101085.	**101017-RPE**	**101017-RPA** SPARE US Adapter for power supply 101085 (one already ships with 101085).	**101017-RPA**
101017-RPK UK Adapter for power supply 101085.	**101017-RPK**		

Included

EL-EnviroPad-TC

Protective Boot
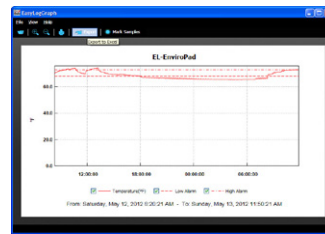
EasyLog Graph Software (via download)

K-type Probe (1 meter)

USB Cable (1 meter)

Optional Accessories

101085 power supply

101017-RPS

101017-RPK

101017-RPE

101017-RPA*

*USA adapter is included with purchase of 101085