Monitor the future

Flexible, low-cost monitoring
Monitor different parameters including:
- Temperature
- Humidity
- Current
- Oxygen level
- Light level
- Pressure
- Voltage

Loggers | Converters | Sensors | Alarms

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EnviroMon

EnviroMon is an extremely versatile, expandable data logging and alarm system. It is ideal for real-time monitoring of a wide range of parameters such as temperature, humidity and energy use. It can take measurements over large areas such as warehouses, greenhouses, cold rooms and factories. EnviroMon is made up of a number of different modules including sensors, converters, alarms and a logger.

You can network up to ten mixed converters to a logger using EnviroMon's own cabling, and add alarm options to the system if required.

Data Logger EL005

What is a data logger?
A data logger is an electronic device that is used to record measurements over time. EnviroMon data loggers simply plug into a serial, USB or (with an adaptor) parallel port on your PC.
The EnviroMon data logger uses sensor converters to enable a wide range of parameters to be measured and recorded.

What can I measure?
By connecting suitable sensors, EnviroMon products can be used to measure temperature, pressure, relative humidity, light, current, voltage, power, speed, vibration... in fact, anything that you need to measure.

What software do I need?
EnviroMon systems are supplied complete with the EnviroMon software for Windows for configuration and data recording. The live and archived data is viewable in spreadsheet or graphical format and can be readily exported to other applications for manipulation or trending.

Three Channel Converter EL001
The three channels on the EL001 can measure any mix of temperature or switch position. The following sensors are available:
• Temperature and door contact.
• Temperature sensors: -30 to +70 degrees Celsius.
• Door contact: uses reed switch and is supplied complete with magnet.

Current Monitor Converter EL040
With the present drive towards energy efficiency, the EL040 will find uses both at home and in industry. The EL040 enables an EnviroMon network to monitor three AC current signals. This can be used to find out exactly where the highest power consumption is in your system, enabling you to improve energy efficiency and save money. AC current clamps or current transformers are used to provide an input to the EL040. EnviroMon can then be used to monitor current consumption or produce alarm conditions when consumption rises above or falls below preset limits.

Converter & Sensor EL026
Temperature & Humidity Converter
EnviroMon can measure humidity and temperature using the EL026 converter and EL030 temperature and humidity sensor. Each EL030 is calibrated for high-accuracy measurements.

Clamp TA011
300 Amp AC Current Clamp
Not requiring battery power, the TA011 is ideally suited to applications where current consumption is being monitored over long periods of time.

Fixed current transformers are available for permanent installation. Please contact our sales office for further information.
The EL042 is an alarm and relay unit for the EnviroMon data logging system. When the EL042 detects an alarm condition, it can activate its built-in sounder, send a message by activating an external telephone dialler, or trigger up to three user-supplied alarm devices connected to its opto-isolated outputs.

**Sensors can also be extended by 3m using the EL032 extension cable and EL020 adapter.**

The EL037 has four input channels. Each channel can be configured independently to measure a number of parameters, using the jumper next to each channel. The EnviroMon system will normally display the input value in millivolts. This can be renamed and rescaled into other units by adding the scaling information to the software.

**EL041 Thermocouple Converter**

The 4 channel EL041 thermocouple converter is designed to measure a wide range of temperatures with most popular thermocouples that use a miniature size thermocouple connector. Featuring built-in cold junction compensation (CJC), the EL041 has an effective temperature range of -270 to 1820°C. (The actual temperature range depends on the thermocouple being used.) In addition to temperature measurement, the cold junction compensation can be switched off to enable the EL041 to measure ±60mV signals.

The EL041 can be used for temperatures ranging from -270°C to 1820°C. It is suitable for a wide range of applications including monitoring of industrial processes and environmental conditions.

**EL037 Voltage, Current, & Resistance Converter**

The EL037 has four input channels. Each channel can be configured independently to measure a number of parameters, using the jumper next to each channel. The EnviroMon system will normally display the input value in millivolts. This can be renamed and rescaled into other units by adding the scaling information to the software.

**Cabling and accessories**

Flat cable can be used for sensors and for small networks (1 or 2 converters). Round cable can be used for larger networks. For larger networks, wall-mounted sockets and fixed cabling are more suitable than using network cables to connect each converter.

- **Network connectors (PP220)** are used with all network cables and are attached using the MI068 crimp tool.
- **Sensor connectors (PP221)** are used with all sensor cables and are attached using the MI041 crimp tool.
- **Sensors can also be extended by 3m using the EL032 extension cable and EL020 adapter.**

EnviroMon accessories available include:

- Wall Mount Sockets
- Network Connectors
- Modem Adaptor
- Crimp Tool for Sensor Connectors
- Crimp Tool For Network Connectors
- Network/Sensor Flat Cable
Each EnviroMon data logger is supplied with EnviroMon for Windows software, which is used for:

- System configuration - naming sensors, setting alarm thresholds etc.
- Download of data to a computer - for long-term storage.
- Graphical analysis of data - either using inbuilt features or by exporting data to other software applications.
- Publishing data (graphs and raw data) to a website — see Dynamic Web Link for more information.
- Computer print-outs - print graphs, raw data, summary reports (including min / max / average values, etc.) on any Windows compatible printer.

Applications for this technology fall into two categories. The first is to publish data for the general public and your customers to view. For example, those users storing products or goods sensitive to heat, humidity or light may wish to publish measurements to demonstrate that the correct conditions have been maintained.

A second application area is the remote viewing of your own data. Examples include the remote monitoring of fridges, freezers and HVAC systems. Because the data is uploaded to a website, it is possible to view it from several different locations simultaneously.

Even with basic web authoring tools and software it is easy to build pages that contain dynamic data.

Example web pages show the data captured at our R&D facility. To view these pages and for more information on setting up your own dynamic web pages, including a simple installation guide, please visit: www.picotech.com/dynamic