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Environmental monitoring and control

Full battery back up
100% data reliability
Ethernet, USB, serial &
GSM/GPRS connectivity

Wireless

MONITORING AND CONTROL FOR
TEMPERATURE, RH/T, FLOOD DETECTION,
ALARM MONITORING, SHOCK AND TILT

PLUS BESPOKE SOLUTIONS AND
SPECIALIST CUSTOMER CARE

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Introduction



At Hanwell Instruments Limited, we pride ourselves in our ability to accurately interpret customer requirements and so provide a total solution to real world instrumentation problems.

We have extensive knowledge in the design and development of data acquisition products, enabling users to seamlessly combine standalone dataloggers, radio telemetry and bus-based instrumentation, in order to assist businesses in environmental monitoring and control.

Extensive research and development has shaped and inspired our range of discreet instrumentation and covers the below monitoring functions for products in use, in transit or in storage:

- Temperature & Humidity Dataloggers
- Lux, Lux & UV Dataloggers
- Flood Alarms
- Humidifiers and Dehumidifiers

A very high degree of flexibility and modularity in the design ensures that customisation and expansion of the system is fully supported. We have also made the redeployment of instrumentation effortless, understanding that clients' processes evolve with time.

Every business is different so, at Hanwell, we work with you to find out exactly what you need. The result may be a standard solution or bespoke, to fit your specific requirements.





Environmental Monitoring and Reporting Systems

At Hanwell, we understand that manufacturers operating in regulated environments require Environmental Monitoring and Reporting Systems, which are deemed critical, within the plant. Our aim is to make this process straightforward and effortless for our customers, whatever the required parameters.

Our RL-series of dataloggers enable users to measure specific environmental conditions. The user can access readings immediately, either directly from standalone loggers or through a local PC by using one of our comprehensive base stations below.

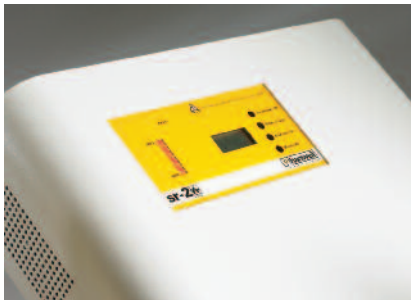


Remote site monitoring

Using the cr2 with integral GSM, users will effortlessly receive data from multiple locations with mobile phone coverage to a central location.

Smart Receivers

Hanwells sr2 device enables users to receive environmental data from multiple locations directly to a PC, in real-time, from remote installations across wide area networks or different geographical locations to a central location creating exceptional flexibility.



Once a system is in place and validated, all key environmental functions can be easily managed, with customised reports, automatic email and alert generation as standard features.

Take charge of your surroundings, care of your products condition and control of your costs

Laboratory monitoring

Hanwell are aware that clinical and medical laboratories operate laboratory procedures in line with internationally recognised Good Laboratory Practice (GLP) procedures. Many others are additionally accredited by various regulatory authorities and require monitoring systems to ensure all clinical samples are stored and processed under correct conditions.

Hanwell have designed a variety of versatile dataloggers within the rl4000 series. The versatility of the Hanwell rl4000 series can be effectively utilised here. The rl4401 and rl4402 wireless temperature transmitter can be effectively used here, with the ability to store up to 100,000 readings, provides the ideal solution for continuous real-time monitoring and alarm notification for laboratory equipment, such as fridges, freezers, waterbaths, incubators and stability chambers.



Such benefits enable you to operate in line with GLP procedures, ensuring the necessary storage space is provided, controlled and monitored under the correct conditions, and the integrity of samples, reagents and records are all maintained.

As with all our telemetry units, monitoring solutions can be integrated into our software for easy-to-read, bespoke, graphical display on your PC, with colour and in real-time.

The rl4401 and rl4402 are precision 4-wire PT100 temperature measuring and radio transmission devices.

- rl4401: single channel
- rl4402: dual channel.

Temperature alarm notification below or above pre-determined requirements - for all laboratory equipment

Hospital monitoring

Exposure of medicines to unacceptable temperatures whilst in storage or in transit could reduce their efficiency, and with most licenses specifying storage temperature requirements at 25°C or less, the affects to hospitals, medical and chemical research laboratories could be incredibly damaging.

Once temperatures have surpassed these pre-determined levels the goods are either ineffective, or even harmful, to the end users, producing costly repercussions and damaged reputations. Hanwell's comprehensive range of dataloggers are designed specifically to prevent such conditions occurring.

The rl4301 & rl4302 are precision 3-wire PT100 temperature measuring and radio transmission devices.

- *rl4301: single channel*
- *rl4302: dual channel*
- *Sensors are connected via 5 pin Lemo plugs and sockets*

They allow wire-free monitoring of a site, with real time alarm notification and historical analysis of data.

Designed to get your supplies there safely





Cold storage monitoring

Cold storage monitoring is essential for all hospitals. For example, storage of blood. At Hanwell, we understand that blood must be stored in unique refrigerators at 2-6°C to prevent contaminants reproducing.



Loss can involve not just the cost of the drugs/plasma products; consider a multi-million pound clinical investigation or research project that is put in jeopardy due to unavailable or faulty materials - not to mention the possible legal implications for patient care.

Hanwell sensors are calibrated to traceable national standards, and our validated software complies with 21 cfr part 11 certification standards for controlled access and archival storage. Reporting is a standard feature of the software with bespoke customisations available.

The rl4102 is part of the 4000 range of advanced temperature and humidity radio transmitters. They allow wire-free monitoring of a site, with real time alarm notification and historical analysis of data. Each rl4102 unit reads its on-board sensors providing accurate and reliable information about environmental conditions. This data is transmitted, at user-defined intervals, to the Radiolog system where it is filed for analysis.

Cost effective solutions - it's so simple with Hanwell

Warehouse monitoring

Extensive customer research and development has gone into Hanwell's vast range of dataloggers assisting with warehouse quality control. Whether it is aeronautics, hydropower equipment or general fragile goods, utilising shock recorders can dramatically reduce costly damage. Similarly medical and laboratory equipment requires equal attention temperature and humidity control.

With specialised storage facilities within warehouses, temperature and humidity measurement for goods requires precise results.

Within all storage areas, large or small, you can find temperatures and humidity varying by tens of degrees; pockets of inactive air coupled with ineffective air management can give rise to localised hot spots, creating an imbalance of tolerance. If undetected, the outcome could be devastating with items stored in such areas ruined, resulting in considerable financial loss.



Hanwell's ml4000 range of advanced temperature and humidity radio transmitters allows wire-free monitoring in an outside area, with real time alarm notification and historical analysis of data, assisting users in eliminating unnecessary financial

losses. Each ml4000 unit reads its on-board sensors providing accurate and reliable information about environmental conditions. This data is transmitted, at user-defined intervals, to the Radiolog system where it is filed for analysis.





Transport monitoring

Damage caused after goods are dispatched from your warehouse is not only frustrating for the end user, but mean costly repercussions to your business. How can you be sure that it won't happen again with your replaced shipment, or again after that? It's completely out of your control...or is it?

Hanwell supply and support a range of monitoring and control solutions including comprehensive devices that travel with your goods and monitor their ongoing condition.

Hanwell have produced a revolutionary environmentalRHT datalogger that has been specifically designed to record temperature and humidity for products during transportation, detailing unacceptable conditions with precise time and date.

The information collected from these dataloggers can be easily analysed in graphical or tabular form, clearly pinpointing vicious spots in your transit circle. Reporting tools deliver key environmental parameter for complete documentation of the shipping and handling environment, allowing you the ability to prevent them in future.

Your delivery's secret diary – revealed!



Cooling/heating plant monitoring

In recent years there has been rising trend in the outbreak of Legionnaires' disease, associated with wet cooling systems (cooling towers and evaporative condensers), water storage tanks etc., resulting in serious cases of infection, fatalities and considerable public concern.

The Health & Safety Executive provides an "Approval Code of Practice and Guidance" on the control of legionella, part of which includes the implementation, management, monitoring and recording of the precautions to significantly reduce risk.



We provide invaluable monitoring for water facilities and storage ensuring, for example, that the temperature is maintained below 20°C for cold water and above 60°C for hot. Further, fluid flow levels, chlorine levels and ultra violet (UV) irradiation water treatment can be monitored and effectively maintained via online reporting and archival storage of conditions, utilising imported colour CAD drawings providing easy-to-read displays.

Maximum accuracy is maintained by affixing telemetry monitoring units on to carrying pipes and placing sensors directly in the water flow. However, where an installation is within an underground conduit or subterranean walkway, we would first complete a radio survey to determine the appropriate action; it may be necessary to mount the sensor remotely from the telemetry unit.

The ms1000 system is designed to generate either latched voltages or currents corresponding to measured values in remote locations. This function is intended to allow radio sensors to directly replace wired-in sensors in applications such as building environmental control where the 3rd party BMS can directly accept analogue signals. Alternatively, it can supply relay outputs for alarm or control functions. A combination of all output types can be created within a single ms1000 system.





Catering

The storage of food under the correct conditions, whether hot or cold, is vital to health and safety and its importance cannot be underestimated.

Consider the implications of a freezer failing overnight, when staff are not present, and the entire content is ruined. Worse, having broken down and partly defrosted it regains life and refreezes the food, leaving staff none the wiser but the consumer at immeasurable risk. Any probability can be minimised with the correct monitoring solution utilising both telemetry and datalogger units relevant probes that can measure and report temperatures between 80°C to +1300°C.

Further, the addition of portable alarm units, designed to provide an audible alarm should monitor units not conform to present limits, can be linked via a radio system. However, our instrumentation is not just for temperature. Many other environmental monitoring issues require equal attention, for example, levels of:



- Light
- CO2
- Humidity
- Formaldehyde
- Wind speed & direction
- UV
- Oxygen
- Pressure
- Solar Flux

This list is endless and should you have a monitoring requirement that is not listed above, do not hesitate to call us for your solution.

As with all our telemetry units, monitoring solutions can be integrated into our software for easy-to-read customisable graphical display on your PC, with colour and real-time.

Hanwell - 24/7 Environmental Surveillance Solutions. It's your call, 0844 815 6227