

CASE STUDY 24 hour monitoring and alarms

For some forty years Planer has helped customers achieve their scientific breakthroughs as well as manage their procedures and processes. The company, based near London Heathrow, specializes in the measurement and control of physical parameters in bio, pharma and medicine.

Planer customers are people who depend on the viability of their stored product and who need systems for monitoring (and alarming) products and equipment. Planer hardware and software measures anything from temperature, humidity, particles, pH and more. The company was a natural choice for a busy unit needing 24 hour monitoring, alarms and reporting.

In common with many facilities, expansion and logistics were not easy for this unit - because of pre-installed equipment and space restrictions. Planer offered a solution that could work through the LAN if required or work standalone. It would monitor equipment and rooms in labs, allow access data from the Internet; alarm with audibles, phone calls, emails and SMS text messaging and be able to graph and log all data whilst complying with prevailing regulations.

Initial observations showed that skilled staff were spending time taking daily manual readings on temperature, gas and equipment performance. The customer needed a simple to use, reliable alarm and monitoring system for sample, equipment and safety which could monitor practically everything in the unit including many types of equipment - storage, production, workstations and room environments. It was decided that the system had to be modular so users could expand it and it needed to comply with regulations including compliance with FDA 21 CFR Part 11.

It was felt that just a simple alarm system might be a wasted opportunity to improve the management of equipment, data and people's time. The solution proposed allowed the user to automatically monitor all equipment using reliable and independent sensors and ones which would alarm via various methods if equipment was not performing as expected. Information could be accessed securely from any browser desktop and alerts – pre alarm conditions defined by the user - could be provided to unlimited users using different methods: text messages, phone calls emails and numerous visual/audible alarms. The solution proposed could collect data, pass that data in real time to Planer's control equipment then process the data and inform users of condition and alarms in user defined ways. Alerts and alarms would be able to 'cascade' in both their importance and their routing to individuals, depending on the equipment involved and severity of the problem. The opportunity was taken to integrate other safety equipment.

After a pre-site survey a plan was drawn up along with a project timetable, proposed options and various costs. Subsequent to installation the system was checked and bedded down over a period of a month or so. With client's permission some maintenance could be carried out remotely if and when needed.

The monitoring and alarm solutions have been designed with expansion in mind. The system installed could house a large amount of data and could cope with many thousands of readings per cycle, automatically backing-up data onto an independent drive. The cost was comparable to other systems that had initially appeared similar but the Planer provided flexibility efficiencies, in addition to those of safety and compliance. A system such as this also helped in Risk Management - useful for feedback to insurance companies who can instruct users that critical samples or processes are to be appropriately managed regarding risk.

Over the years Planer has sold many thousands of state of the art electronic, electromechanical and software products in over sixty countries. The company is approved and assessed to the demanding standards of medical device manufacture: ISO13485:2003 & Medical Devices Directive, Annex 11 93/42/EEC: LRQA. ISO 9001:2000, ISO13485:2003.