



Case Details

A product developed by CoolPac allows life saving pharmaceuticals, requiring low stable temperatures, to be shipped without refrigeration. CoolPac needed to undertake extensive testing to validate their product. There was a need to monitor changes in temperature. The ability to abort testing or make changes to the test without physical access to a PC or the data logger was necessary to make the process easier and more cost effective.

Key Requirements

- Remote communications
- SMS ability
- Monitoring and logging solution

dataTaker Data Logging Products

- 1 Cost effective data logging solutions
- 2 Capable of measuring and logging DC voltage, current and resistance sources in addition to digital signals
- 3 Suitable for small to large scale applications
- 4 Rugged design and construction provides reliable operation under extreme conditions
- 5 Designed and manufactured in Australia to the highest quality standards



dataTaker SMSX Modem: These modems can be used with any of our logging products for establishing remote communications and SMS messaging capability.

dataTaker Solution

Equipment

- dataTaker DT500 data logger
- dataTaker SMSX GSM modem
- Mobile phone

Sensors

- RTD Sensors

Implementation Notes

The dataTaker DT500 was selected for its ability to accept 10 x differentially connected RTD sensors to monitor and log internal temperatures of the products being tested. All RTD sensors were calibrated to traceable standards and any linearisation errors were corrected using the DT500's user programmable functions. With dataTaker's SMSX modem connected to the DT500, the client was able to send a simple SMS message with their mobile phone and get a "snapshot" of the temperatures during the trials. The DT500 was also set up to send an SMS message when an alarm was triggered. When there was a need to abort the test or make changes to the test such as changes to the alarm thresholds, the speed of measurement, or when toggling digital channels, this could be done by a sending an SMS message back to the dataTaker data logger.

The alarm destinations could be changed via SMS and confirmation messages were programmed into the DT500 such that if the SMS message was not responded to within a nominated time, a message was then sent to the next phone number in a list.

Each trial was run full time over 5 days per week. The ability to access the data anytime anywhere via mobile phone was a huge benefit to the client.