

Campbell Scientific ALERT121A ALERT systems installed in National Capital Authority ALERT Flood Warning Network



The Project

Sentinel Pty Ltd, an Australian based environmental services company, manages the flood monitoring network for the region around Australia's capital city, Canberra. The network of monitoring stations transmits data at scheduled intervals, and predetermined water level changes, to the Australian Bureau of Meteorology and the NCA.

Sentinel Pty Ltd are currently in the process of upgrading the NCA flood warning network, with a number of Campbell Scientific ALERT121A ALERT canisters. The new ALERT systems installed to date are Advanced ALERT Field Canisters consisting of a CR800 datalogger, AL200 ALERT2 and ALERT1 Encoder, Modulator and Sensor Interface, an SD125 radio and a NextG radio, to provide a secondary form of communications from the stations. Data from these ALERT systems is transmitted over the 151.5MHz frequency band, using the ALERT protocol. This data is then received into the Australian Bureau of Meteorology's Enviromon software, whilst simultaneously, the complete measurement data is transmitted over NextG to LoggerNet software using Campbell Scientific IP callback.

About the ALERT121A

The ALERT121A is a rugged, turn-key system designed for ALERT style standpipe installations. This system is field configurable, fully programmable and sustainable for field and repeater stations. The ALERT121A includes three to six sealed connectors on the canister lid, providing backwards compatibility with existing sensors. Although the ALERT121A is a turn-key system, it can be easily adapted for custom applications, using Campbell Scientific's modular line of communication and sensor products.



Figure 1.ALERT121A canister

Benefits of Choosing Campbell Scientific ALERT Systems

- New future proof technology – AL200 units support the ALERT and ALERT2 protocols. Upgrading an ALERT system to ALERT2 in the future is as easy as upgrading the Operating System.
- ALERT systems support a wide range of sensors – the only constraints to measurement, are the limits of the ALERT protocol and the receiving software.
- More detailed data – the ALERT protocol is limited in how it transmits data (integers from 0 to 2048). With an advanced ALERT system from Campbell Scientific, detailed measurements are stored on the datalogger and can be retrieved using Campbell Scientific datalogger software, either in-situ or remotely via NextG communications.
- Extra communication platforms that work simultaneously – IP callback; FTP; Emails; SMS and SCADA network connection are all possible with a Campbell Scientific ALERT system.
- Backwards compatibility with existing canister sensors.

For further information on our ALERT product range, visit our website www.campbellsci.com.au/flood-warning or email our Application Engineering team on info@campbellsci.com.au