

case study

Australian Nomad Technologies(ANT) Successfully Deploys Campbell Scientific Telemetry Using their Satellite(VSat) Internet Network

Obtaining vital data from telemetry at a remote location has traditionally been done via a land based cable solution. Where there was no telephone connection available due to the site's remoteness, then a mobile telephone based solution (e.g., 3G, etc.) has sometimes been employed. Now there is an extremely reliable solution for most telemetry sites.

ANT has chosen to utilise geostationary satellites for their telemetry networks. Unlike "Low Earth Orbiting" satellites, once a line of sight path to the satellite has been established, it becomes a permanent, fixed path that does not need to be re-established for each data session. There is no satellite hand-over process to go awry, and unlike traditional phone based systems, there is no underground cables to be cut, and remoteness is no longer an issue.

To save on power at the remote location, Jeeva and the techos at CSA have built a script for the logger that will switch the satellite system on every hour (or other period as required) for a period of time long enough to send the required data. It can also be programmed to open and close gates, valves etc , or switch on a camera, on command.

ANT's satellite network covers all of Australia and New Zealand and has proven to be extremely reliable, suffering less than 2 hours of unplanned outage time during the last 12 months. Australian Nomad Technologies (ANT) has developed a VSat satellite system that can be either portable or fixed. ANT has developed this system in conjunction with CSA and various State authorities, to be deployed, either by ANT's installers , or by the customer. A training DVD is supplied with the kit, and further training can be arranged by ANT at the customer's preferred location.

Australian Nomad Technologies provides both portable and fixed Satellite Broadband services.

<http://ausnomadtech.com.au>



New Research Grade Net Radiometer

In March 2010, the CNR4 replaced the CNR1 and CNR1-L. Like its predecessors, the new CNR4 is a rugged net radiometer from Kipp & Zonen consisting of a pyranometer and pyrgeometer pair that faces upward and a complementary pair that faces downward. Its upper pyrgeometer has a meniscus dome that allows water droplets to easily roll off of it, and increases the field of view to nearly 180° instead of the 150° field of view you get with a flat window.

With the CNR4, each pyranometer and pyrgeometer is individually calibrated for optimal accuracy. The CNR4 also weighs less than its predecessors and contains both an internal thermistor and an internal platinum resistance thermometer (PRT). This radiometer does not include a heater, but the optional CNF4 ventilation and heating unit is available for customers who are concerned about dew or frost forming on the domes. The CNF4 easily attaches to the CNR4 (shown left).