



Versatile Iridium Campbell link

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A versatile remote data communication solution has been proven to work between the UK and Antarctica. The system is automated, almost ‘off the shelf’ and ideally suited to automatic weather stations and other low/medium data rate logging applications. Telemetric data reduces the need for remote site visits, can provide vital diagnostic information and near real-time weather data useful for logistics planning. The system is based around the Iridium 9522(A) ISU and Campbell Scientific CR1000 logger. A watchdog circuit is included to minimise possible problems and to allow remote re-programming of the logger. Campbell’s LoggerNet software running on the base station enables communication with multiple remote stations. Communications hardware costs 1500 euros and the logger costs under 1500 euros. Airtime and subscription cost for a system downloading 10kbyte per week is in the region of 400 euros per year. 10 minutes (data rate 5-10kbyte/min) of airtime per day equates to a power load of approximately 1.5Ahr (12V) per month.