Wireless innovation

Wireless Innovation in Action

Renewable Energy Monitoring

Learn how Wireless Innovation help companies in the Renewables sector to monitor and control remote locations

The challenge of remote locations for the Renewables Industry

Renewable energy sources tend to be in remote or hostile locations. Any land-based installation has to deal with the planning process and meet the inevitable objections from local residents and countryside campaigners. This is one of the reasons why land based wind farms tend to be situated in isolated spots, on hilltops and moors away from settlements and livestock.

Secondly, remote locations are simply better natural environments to generate renewable energy. Wind farms are sited offshore or on remote hilltops because that is simply where they are most efficient, it's where the wind is strongest. Similarly, solar energy is more accessible in higher, more remote locations where people choose not to settle and tidal power has to be harvested out at sea.

The need for real-time data

One of the biggest challenges in the renewable energy industry is finding a suitable location. To justify the investment involved in building and installing a wind turbine array a prospective site has to meet stringent requirements with regard to wind speed and frequency. Too little wind and the array won't deliver the required amount of power, too much wind and the array is vulnerable to damage.

Similar feasibility calculations apply to solar and tidal installations, all of which require careful and prolonged monitoring to ensure that the energy yield from a particular site justifies the investment.

The need for monitoring doesn't end once the installation has been built. In order to ensure that a solar or wind array is operating at maximum efficiency a range of key components need to be measured day and night. That data has to be transported securely and in real-time to a control office where metrics such as wind speed, solar radiation power and individual component performance can be assessed.

Wireless Innovation Ltd. Unit D2, Churcham Business Park, Churcham, Gloucestershire, GL2 8AX.
Tel: +44 (0) 1452 751940 Fax: +44 (0) 1452 751941 Email: sales@wi-ltd.net
www.wireless-innovation.co.uk

Retrieving data from remote and hostile locations

Cellubi from Wireless Innovation provides a simple, cost effective solution to the problem of retrieving assessment and monitoring data. Unlike other M2M solutions, Cellubi provides the flexibility for engineers to design the service that suits them best. This might mean regular "heatbeat" signals or time stamps to confirm the condition of specific instruments. It might mean a series of alarms or triggers configured to meet specific thresholds or it might mean a complex combination of variables. Whatever the precise solution that's required, Cellubi can be configured to deliver exactly the data that's needed in the most cost-effective way.

Cellubi provides the most comprehensive coverage available from any M2M cellular service. With multiple partners in more than 160 countries, the Cellubi service gives customers an unrivalled choice of carrier partners and the security of knowing that if their chosen service fails, a fall-back can be configured with an alternative carrier. This failsafe service can be a crucial factor in important infrastructure projects.

Cellubi

Manufacturer:	• Wireless Innovation
Network:	• VF/EE/AT&T/ Verizon
Device Type:	• Cellular Service
Markets:	• SCADA/ Telemetry • Mil • OEM • Tracking • Utility

A track record of success in Renewables

Cellubi from Wireless Innovation provides a simple, cost effective solution to the problem of retrieving assessment and monitoring data. Unlike other M2M solutions, Cellubi provides the flexibility for engineers to design the service that suits them best. This might mean regular "heatbeat" signals or time stamps to confirm the condition of specific instruments. It might mean a series of alarms or triggers configured to meet specific thresholds or it might mean a complex combination of variables. Whatever the precise solution that's required, Cellubi can be configured to deliver exactly the data that's needed in the most cost-effective way.

Cellubi provides the most comprehensive coverage available from any M2M cellular service. With multiple partners in more than 160 countries, the Cellubi service gives customers an unrivalled choice of carrier partners and the security of knowing that if their chosen service fails, a fall-back can be configured with an alternative carrier. This failsafe service can be a crucial factor in important infrastructure projects.

Wireless Innovation Ltd. Unit D2, Churcham Business Park, Churcham, Gloucestershire, GL2 8AX.
Tel: +44 (0) 1452 751940 Fax: +44 (0) 1452 751941 Email: sales@wi-ltd.net
www.wireless-innovation.co.uk