

Case Study

Customer : Energy Control Group
Product : 868 transmitters
Application : Energy monitoring
Industry/vertical : Utilities

Smart metering, smarter radio communications

Analyst company IDC, has forecast that the majority of EU member states will proceed with mass smart meter rollouts during 2013 and 2014. In the UK, the Department of Energy and Climate Change (DECC) has proposed the country's smart metering implementation program take place in 2014.

Many public sector and private organisations are looking to be early adopters of the technology, as it provides real time information on energy usage. This in turn can help to target consumption and save up to 20% carbon and utility costs, a significant saving at a time when increasing energy costs can impact a business's bottom line.

Energy Control Group is at the forefront of this emerging market. The company develops and manufactures automatic meter reading technology and management software that will help to underpin large scale changes in the way businesses, utilities and the public sector manage future energy and water consumption.

Issue

The more regular and up to date a meter reading, the more likely it is to be able to identify trends and improve efficiency. To do this manually across large multi-building premises, such as manufacturing facilities, universities, hospitals and schools, is time-consuming and expensive.

Energy Control Group wished to develop a means to continuously take readings

electronically and then communicate consumption information, so energy managers had a high level of real time visibility and control over energy consumption.

Energy Control Group's DATABIRD was conceived as an automatic reading (AMR) product that would physically interface with utility meters on site and then feed consumption data via wireless communications. DATABIRD would be simple to install, inexpensive to run and offer secure, reliable collection and transmission of energy and water readings. To achieve this Energy Control Group sought a license free solution that could meet its communications infrastructure needs.

Solution

Energy Control Group sought the support of Wood & Douglas, a specialist in wireless communications, to provide an effective solution. To create the necessary radio links, Wood & Douglas created a series of bespoke transmitter units Energy Control Group based on its 868 series UHF transmitters. Ideally suited for use in crowded radio telemetry bands the 868 transmitters are small, cost-effective radio modules with mounting pins that could be inserted directly into Energy Control Group's DATABIRD hardware to deliver the required radio connection.

The 868 produces a low power 25mW RF output, with excellent sensitivity figures for the receiver sections. This makes it highly suitable for small to medium range transmission and reception. Energy Control Group's DATABIRD smart meters are able to securely transmit energy consumption data to the local receiver hub where the data is logged for processing by Energy Control Group's management software. Data can then be passed onto the billing system.

With secure, real time consumption data available at the touch of a button, energy managers now have the tools and information systems they need to target and reduce energy and water consumption.

- Accurate, low power transceivers for smart meter product
- Easily integrated with OEM hardware
- Secure license free radio

