

Data logger and analysis function

The Data logger function, integrated in the remote control, enables the recording of data from the system.

This data allows off-line analysis of the system energy consumption, in addition to the logging of power cuts and other prevailing events (low battery etc).

Remote control and programming centre

The RCC-02 enables the user to monitor the system and adjust it totally to the installation by allowing the setting of the many parameters available.

System will support multiple remote controllers, available up to 300m away from the system.



Data logging of power consumption and generator usage



Batteries and System Integration

Full system integration available to suit your requirements.

VxI

POWER When you need it!

Lincoln-based Vxl Power, the designer and manufacturer of power supplies, inverters and battery chargers, has developed a new power-conversion hub that is particularly suitable for use in off-grid renewable-energy applications.

Working in conjunction with Nigel Lowthrop, founder director of the Hill Holt Wood project at Norton Disney, Vxl Power has created a product that offers an easy way for remote dwellings to make use of energy from wind turbines or photovoltaic (PV) arrays, with backup from a conventional diesel-fuel generator.

As well as providing inputs for these various energy sources, the new Vxl Energy Hub uses a Studer 3.5kVA Xtender inverter, which performs the dual function of charging a bank of batteries and converting the batteries' DC output to AC for use by the householder. The real advantage of the Vxl Energy Hub is that it combines the Xtender with all of the ancillary equipment needed to provide a single-point solution.

"There is a widespread tendency for isolated farms and houses to simply run on generators," commented Nigel Lowthrop, "but that can be an incredibly expensive way of producing electricity if all you want to do is put on one or two lights.

"The Hill Holt Wood site is completely off-Grid, so we use a mixture of renewable and conventional energy sources to produce the electricity we require. With the new Vxl system,

we can charge a set of batteries using energy from our PV array and generator, and in summer the fully charged batteries will supply our household needs for a few days. When the battery voltage drops back below a certain level, the generator starts up automatically and stays on until they reach 100% capacity again. This setup is working really well for us."

The Vxl Energy Hub has been specifically designed to allow rapid configuration and installation of off-Grid renewable energy systems with multiple sources of energy. Intelligent generator control allows system operation when the primary renewable sources are less available or if there is a peak in demand.

Suitable for installation within buildings that are not primarily designed for electronic equipment, the Vxl Energy Hub is housed in a robust, sealed cabinet, which is equipped with a temperature-controlled fan to remove any excess heat.

The built-in inverter will synchronise with the incoming AC supply and can be used to boost the AC output when the load exceeds the capability of the incoming AC. In addition, MPPT (maximum power point tracking) controllers can be installed within the cabinet to provide optimised solar or wind-turbine input. A local weatherproof switched AC outlet is available as an option, while the use of industry-standard BS 4343 input and output connectors means that the system can be installed rapidly with the minimum of wiring for the AC supply.

Two displays on the front panel enable the user to check the status of the system and batteries, and there is also a useful facility for collecting historical data on parameters such as daily energy usage and generator runtime.

For more details, visit www.vxipower.com and www.hillholtwood.com



Xtender Control Panels



Hill Holt Wood Site

