Teaming Data Systems for Portable Power

Industry: Power and Energy
Product: Modbus Ethernet to Serial Gateway

• The Challenge

Aggreko, a world leader in temporary power and temperature control rental services, deploys large power installations in remote locations. A typical installation might include a set of six generators and a transformer housed in a 40 foot container. A SCADA system monitors and controls the diesel engine sets and various I/O for generators and transformers. The individual generators and transformers also have fire safety systems that use serial interfaces. Additional control components include Allen Bradley PLC® units operating on a MODBUS/TCP protocol, SCADA, serial and Modbus protocols. How do you tie it all together?

• The Solution

B&B Electronics provided Aggreko with custom panel assemblies that incorporated industrial Modbus Ethernet to serial gateways. The gateways connect serial devices to an Ethernet-based SCADA system and provide conversion to the Modbus/TCP protocol. Each transformer unit contains a NEMA-rated panel kit from B&B Electronics that uses two RS-485 data acquisition modules for I/O connections, a Modbus Ethernet serial server, a power supply, relays, and wiring. B&B's unmanaged switches tie all the Modbus Gateways together and connect them to the SCADA master. Monitoring and control of the transformers is seamless.

• Why B&B Electronics?

- Flexible connectivity between Modbus RTU, Modbus ASCII to Modbus TCP Ethernet network
- RS232/422/485 configurability of the serial ports suitable for Modbus protocol
- Ability to withstand harsh industrial environment (-34 to 74°C), DIN mount
- Total integrated solution: Gateways, managed/unmanaged switches, cables, power supplies packaged in a NEMA enclosure

• The Product

Vlinx™ Model MESR901 – Modbus Ethernet to Serial Gateway

- Slim, Industrial Enclosure DIN mount
- Flexible Ethernet or Serial Master/Slave configurations
- Web Server, Configuration Software
- Wide operating temperature (-34 to 74°C)

VLINX™ Ethernet Serial Server

Model MESR901

B&B ELECTRONICS

USA and International Headquarters p: 815.433.5100 f: 815.433.5109 url: www.bb-elec.com
Europe, Africa, Middle East p: 353.91.792444 f: 353.91.792445 url: www.bb-europe.com