

## Managed Smart Metering



### Client Requirement Summary

- Device mounted in street/pole cabinets
- Resilient communication paths
- Rugged to power industry standards (IEC 61850-3)
- Advanced security and routing functions
- Integrated with northbound systems

### Key Benefits

- Extended temperature option
- Internal PSU option
- Tough plastic case
- External antenna or stub antenna
- HSPA connectivity
- 8 10/100 Mbps Ethernet ports
- Dual SIM for network redundancy
- SMS
- Central management
- Signal strength, SLA reporting and alarming
- Script language
- Serial, analogue, digital I/O
- Optional E1, X.21 and other legacy WAN interfaces

### Requirement

A large utility operator in Spain is moving to a Smart Grid infrastructure in accordance with the guidelines introduced in Spain based on EU recommendations.

The company is using a mixture of power line to homes and 3G/GPRS/DSL at their substations to support smart metering and remote control of substations. Homes connected to the electricity grid communicate with a substation using power line technology. Substations communicate with their supervisory and control systems using a wireless/wired broadband connection with equipment that has been environmentally hardened to suit the tough substation environment.

### The Solution

The GW7300 Series router was selected because it provides a rugged yet cost-effective wireless solution as well as the ability to operate with dual SIMs. As the operator required a resilient solution, the ability to fall-back to an alternative SIM connection is essential. The GW7300 offers dual SIM functionality and extensive 2G/3G signal strength statistics and alarming so that the quality of the connections over time can be simply monitored.

The local power line aggregator is connected to an Ethernet interface on the GW7300. The other Ethernet interfaces can be used to remotely manage on-site IP based equipment.

