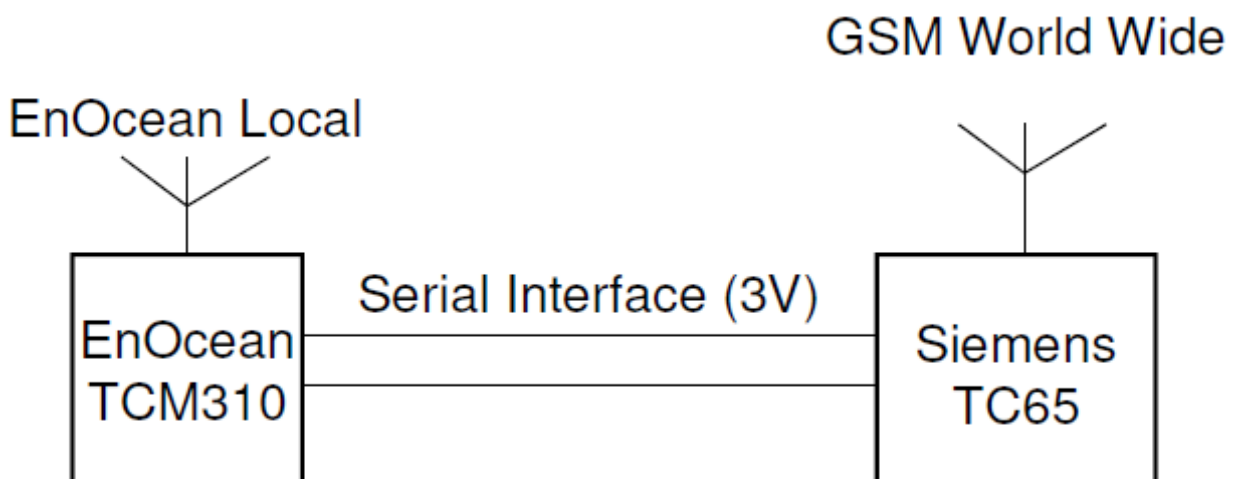Green.Smart.Wireless.
enocean®

GSM ENOCEAN GATEWAY –
EnOcean bidirectional control via GSM

Controlling EnOcean Based Products via GSM

Have you ever gone on holiday and wondered if you have left the lights on?

EnOcean technology can easily be built into electrical appliances and building installations for the purpose of wireless control, sensor monitoring, and home automation. Most of these devices will be sensors and receivers. The sensors might be transmitting data relating to temperature or whether a door/window is open, and the receivers will control electrical items within the building. Obviously somewhere in amongst this lot there needs to be some intelligence to make sense of the information and act accordingly.

An ideal interface to provide control of your EnOcean enabled devices is e.g. Siemens TC65.

This Siemens TC65 device has the functionality of a micro-controller combined with all of the connectivity you could wish for (GSM/GPRS and an embedded TCP/IP stack). The TCM 310 EnOcean transceiver is controlled via a serial inter-face that is compatible with the primary serial port on the TC65.

The main functionality of the interface is handled by the Java Virtual Machine (JVM). All the JVM needs to do is be able to read and write data to the primary serial port.

QUAD-BAND

GPRS CLASS 12

JAVA IMP-NG

POWERFUL PROCESSOR/ LARGE MEMORY PROFILE

TCP/IP CONNECTIVITY

SIM ACCESS PROFILE

INDUSTRIAL INTERFACES

FAX FUNCTIONALITY

RoHS &WEEE compliant

TC65 Terminal
Plug into the wireless M2M market

Details of the TCM 310 message structure are well documented in the EnOcean documentation. This enables an application developer to write some Java functions to send telegrams to the TCM 310 using the serial interface. The TCM 310 will then transmit the control messages over the air effectively mimicking any EnOcean transmitter like PTM or STM modules.

Once these two devices are interfaced they form the heart of the EnOcean control system. An interface for incoming SMS messages can be created allowing users to turn on appliances within the home or office from anywhere in the world (cellular networks permitting).

Further it is also possible to read the telegrams back from any EnOcean transmitters like PTM, STM or TCM modules creating a bidirectional communication. This could tell the user via SMS or email if a door/window has opened indicating a possible burglary. It could warn of other problems as well such as pipes freezing or the freezer defrosting.