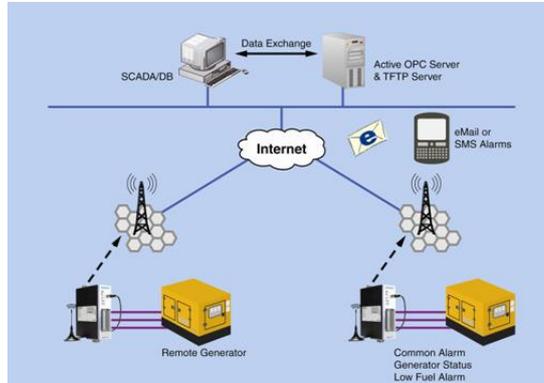


Remote level monitoring

Telematics

June 2019



Customer

We are dealing with many companies who are exploiting today's rapid communications capabilities and are offering remote asset management services using SMS and the internet. Known as telemetry or telematics, they can monitor critical features of many types of equipment far more cost effectively than by using service or maintenance personnel. With so many organisations operating globally the cost of monitoring the status of remotely sited equipment is very substantial.

Application

Recent escalation of the cost of fossil fuels means that they have become a desirable commodity and are prone to misappropriation. In countries where no formal electricity distribution system exists, remotely sited equipment such as mobile telephone masts are powered using a generator set. Every few days an operative checks on the generator's fuel level and tops it up as required, but cannot make a judgment as to if any fuel has been stolen or has been replaced with another liquid.

Product

The T/LL171 sensor was developed from our S86 capacitive switch by re-writing the software to have a continuous output of 4-20mA. This resulted in an accurate and fast responding sensor which is very suitable for this application. The telemetry system can be programmed to take regular measurements of the tank contents and if there was a sudden fall in the fuel level, an alarm or SMS can be sent to a nominated contact. Future sensor developments will result in being able to tell if the fuel has been tampered with such as added water to mask the theft of fuel or the addition of different grades of fuel used during refueling.



Fozmula is very pleased to be instrumental in offering engineering solutions to global markets with custom designed products. This is one more in a long list of application based products which Fozmula has designed and put into production.