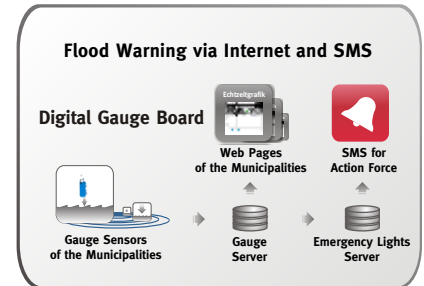


unlimited access to your data

Fire Service-Ruprechtshofen: Digital Gauge Board

Background

With myDatanet, Microtronics Engineering GmbH has developed an innovative wireless measurement and data acquisition system which is suitable for a wide range of applications. Utilising wireless measuring instruments and data transfer via GPRS, data is available via the internet in real time, at any time.



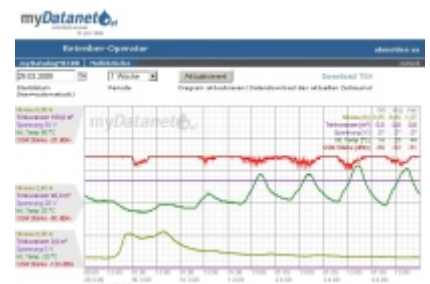
Problem

To date when a risk of flooding was present, emergency services were forced to control rivers, lakes etc. at frequent intervals. Safety measures were initiated when rising water levels were observed on level gauge boards, however in order to provide a rapid response to a quickly changing situation an automated system was required using remote monitoring.

Solution

Through www.wasserstand.info Microtronics offered a simple data collection solution which would transmit levels of rivers and lakes via the internet. Using the my Datanet system measurement data is sent continuously to the central server which sends alerts via SMS or e-mails in case of dangerous water levels. The emergency services and land owners can respond by alerting the public, building protective barriers and securing buildings. Data is acquired by a “digital” gauge board which consists of a sensor installed locally by qualified personnel. The control centre can be operated by Microtronics or the emergency services.

System options can include redundant GPRS-connection with host standby for all available providers, display of the field strength for all available providers when using myDataSIM, a redundant measuring system with 2 sensors and automatic fault notification, automatic and semi automatic validation of the measuring data by comparing the gradients (variances can be manually controlled), sensors with displays for on-site-metering.



Measuring Points

At a bridge in Ruprechtshofen passing the Melk river (Lower Austria) a measurement station has been installed as a pilot scheme. The myDatalog4 devices used can be operated by battery packs.

In addition to water level it is also possible to acquire data concerning the flow rate. Diagnostic information such as device temperature and GSM field strength are also recorded. The integrated system alert feature in case of device faults or discharged battery, uses SMS or E-Mail even when the main power source has failed. This ensures that system information is available 24 hours a day.

