SCOM-100

GSM/GPRS alarming & remote control

Municipal water pipeline monitoring

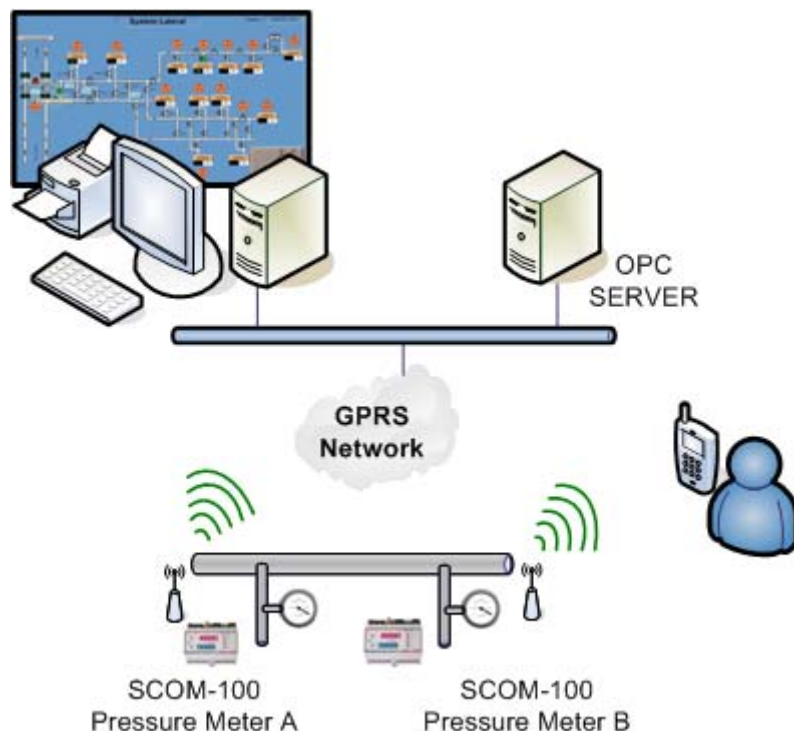Version: 1.0 – January 2012

Introduction

Pressure in a municipal water system needs to be maintained kept at 0.3 Mpa in order to be able to deliver a proper stream of tap water to homes and businesses.

Many water utility companies all over the world use remote monitoring systems in order to be able to immediately respond to leakages and sudden drops of water pressure.

Requirements

- Monitor pressure in points of interest in a distributed municipal water pipeline system
- Monitor and report data from every pressure point to a central database or SCADA system.
- Alarm immediately on sudden pressure drops threshold alarm
- Take advantage of a cellular communications network using SMS and GPRS communications
- High expandability

Proposal

Infinite SCOM-100 is a GSM/GPRS Edge RTU designed specifically for remote monitoring systems. Traditional cellular products use polling to request data, which requires a static and public IP.

SCOM-100 can communicate with a central database or SCADA system regardless of what kind of IP address it uses over GPRS. In addition, it provides real time data from the remote location, which is impossible with a polling system.

Moreover users at the central station can issue commands to the remote stations to perform standard control actions because the SCOM-100 supports local functionality, making it a truly PC-free solution.

Traditional polling systems can take up to 3-4 minutes to obtain four different pressure values from four different monitoring sites. The SCOM-100 GPRS communications deliver the information in just a few seconds. Furthermore receive SMS alarms instantly while maintaining GPRS connectivity.

SCOM-100 communicates via SMS and GPRS with users, PCs, other SCOMs in M2M all at the same time. The SCOM-100 OPC Server software integrates seamlessly with any SCADA system.

Why SCOM-100
 - All-in-one cellular GPRS quad band solution
 - Real-time data acquisition
 - Easy to implement and maintain
 - Seamless connection to SCADA via OPC server
 - SMS alarms & M2M functionality