SCOM-100
GSM/GPRS alarming & remote control

Radio tower monitoring
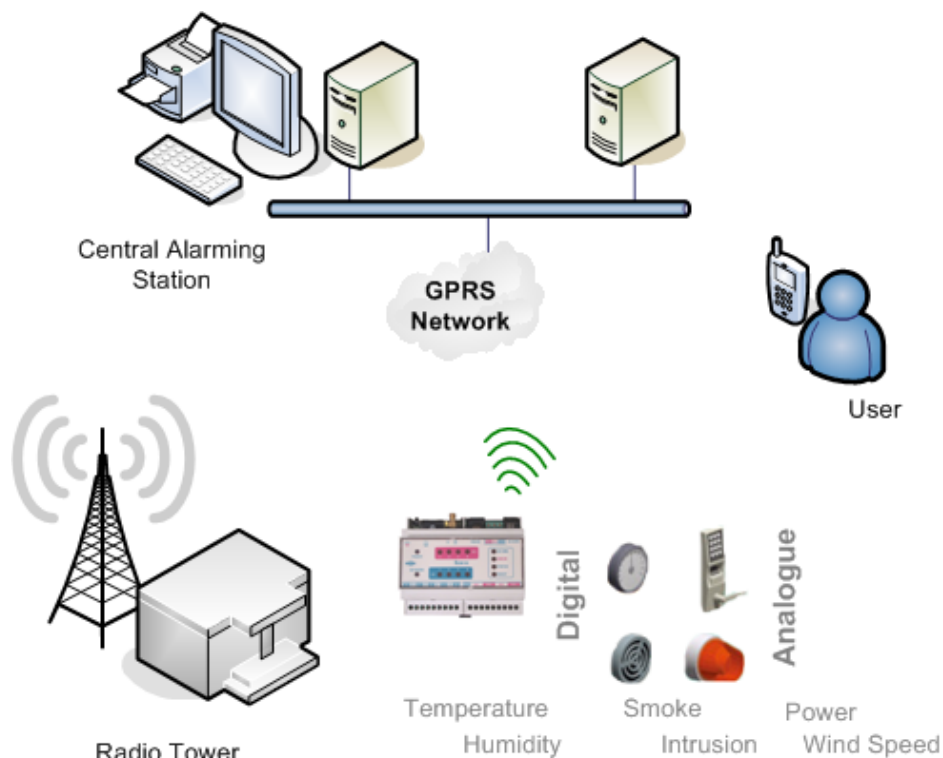Version: 1.0 – January 2012

Introduction

Traditionally radio tower facilities rely on a PLC with a GPRS modem to provide remote control and monitoring functionality. This approach is low level, requires PLC software programming and faces the IP problem. The existence of dynamic and private IP make the attempt to establish reliable and efficient bidirectional communications complex. Solutions with DDNS are simply not adequate and usually cause rather than solve problems.

SCOM-100 is a GSM/GPRS alarming, remote monitoring & control unit with expandable I/O capable to handle demanding applications such as alarming and monitoring of Radio Towers.

Requirements

- Support GPRS and SMS communications
- Remote control capability
- Combine industrial standard AI, DI, DO and have expandability
- Work with private and dynamic IP address
- Integrate with a SCADA system via standard OPC communications

Proposal

Infinite SCOM-100 is a GSM/GPRS Edge compatible cellular RTU solution designed specifically for remote monitoring systems.

SCOM-100 supports both dynamic and static IP making it possible to communicate with a central database or SCADA system over GPRS. In addition, it provides real time data from the remote location. Users at the central station can issue commands to the remote stations to perform standard control actions because the SCOM-100 supports local functionality.

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

SCOM-100 is designed to operate extreme conditions with operational temperature at -20°C to +60°C. It has build in 2 analogue inputs, 4 digital inputs with counting capability and 4 relay outputs. It can expand using I/O expansion modules up to a total of DI: 36, DO: 20, AI: 18.

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 and M2M functionality concurrently with GPRS
- Low cost I/O expansion modules