



Fire Extinguisher Monitoring with ZigBee™

Fire extinguishers are a vital part of safety infrastructure in nearly every industrial, commercial, hospitality, educational and medical environment.

Software Technologies Group (STG), in partnership with Freescale Semiconductors and Mija Inc., has designed and developed a wireless fire extinguisher monitoring system using ZigBee technology. The system monitors extinguisher pressurization, extinguisher presence, obstructions that would prevent extinguisher use, and tampering with the system.

Software Technologies Group provides a full suite of software and services to complete your 80215.4 and ZigBee™ wireless products.

802.15.4 Bridge

OEM Router for ZigBee™ Networks

802.15.4 MAC and Core RTOS

MAC Extender

Embedded Software Development

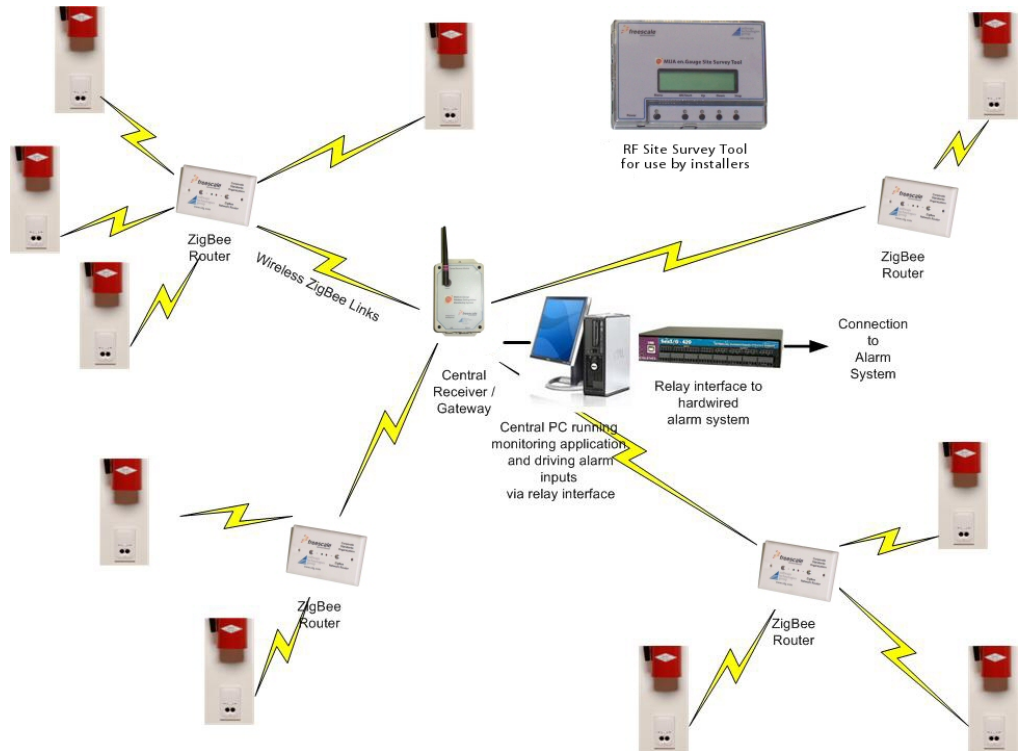
Hardware Design Services

Multiplatform Porting Services

Reference Design Development Services

OEM Customization and adaptation

Application Programming Interface Development



Wireless System Components

The system is a complete wireless solution to provide fire extinguisher monitoring and connection to existing building alarm infrastructure. Components include:

- Wirelessly enabled Sensor Interface Module (SIM)
- Central Gateway
- Router with battery backup
- Control Panel GUI
- Site Survey tool

For information, please call 708.547.0110 or write sales@stg.com



Software Solutions for Product Developers

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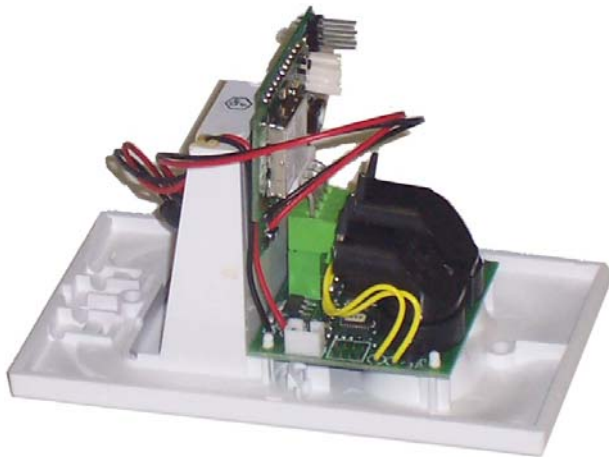
708.547.0110
708.547.0783 (fax)



Central receiver



Daughterboard to wirelessly enable SIM



SIM with daughterboard in place



Rear view of router

Product Features

- General status reported every 180 seconds
- Trouble and alert conditions reported immediately
- Networks up to 1200 nodes
- Sensor battery life: 2 years w/ 9 volt
- Designed to meet UL 2017 requirements

ZigBee Implementation Features

- Custom non-public profile for SIM
- Tree-based routing
- Extensions to support self commissioning
- Radio module battery life: 3+ years w/ 2 AAA batteries

Software Technologies Group Role

STG is a single source for all aspects of design and development including

- Wireless system design
- Board level hardware design
- Firmware development
- Alarm panel interface
- Project mechanicals

Additionally, STG provided all manufacturing and logistics management for the initial deployment project.

About Software Technologies Group, Inc.

Software Technologies Group, Inc. (STG) provides engineering solutions for product developers allowing its customers to fully implement hardware and software technologies in their products. Since 1990, STG has provided end-to-end product development related services including design, development, testing and support. STG's broad expertise in a variety of commercial, real-time and embedded operating systems and proven development methodology enable delivery of total solutions for a variety of markets. STG can be reached at 708.547.0110 or at its website <http://www.stg.com>.

"ZigBee" is a trademark of the ZigBee Alliance which can be reached at <http://www.zigbee.org>.



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