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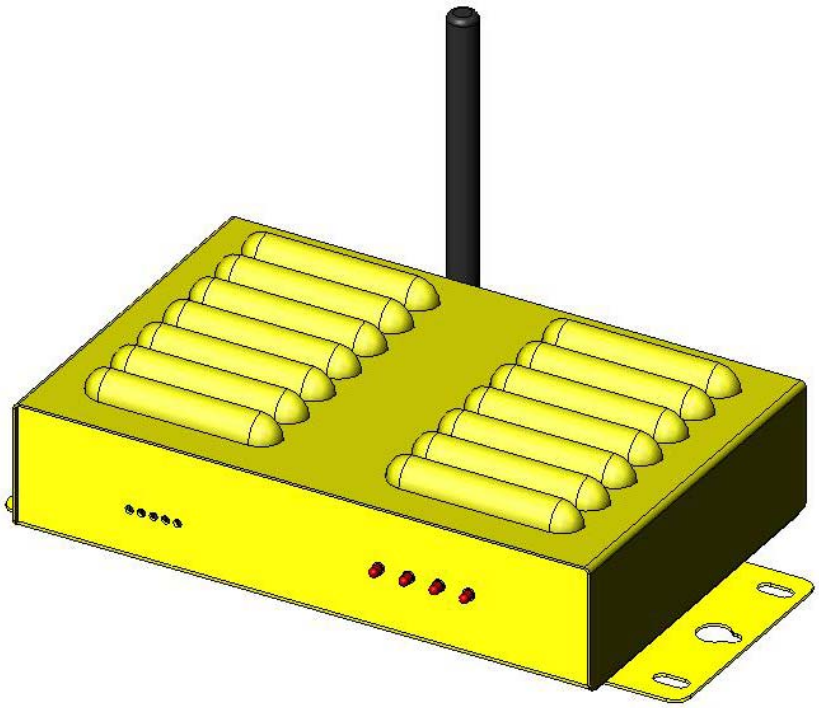
PRELIMINARY SPECIFICATION

InVision™ Wireless Network
Gateway GTW-1

Designer Specifications

June 29, 2006



SYSTEM DESCRIPTION

The Bussmann InVision™ Network is a wireless sensor network that will allow data to be transmitted about the status of sensors monitoring overcurrent protection devices with in a facility. The system uses a mesh network topology to enable highly reliable data transmission. The data is then sent to a web based portal. The portal allows the user to define how they wish to be notified upon an event occurring with in the network of sensors they are monitoring. The network operates in the 900MHz range of the ISM band of the frequency spectrum.

The sensors operate on a different frequency from the data transport layer of the network. The mesh network operates on a second frequency. This allows for the system to have a high reliability and minimize data collisions.

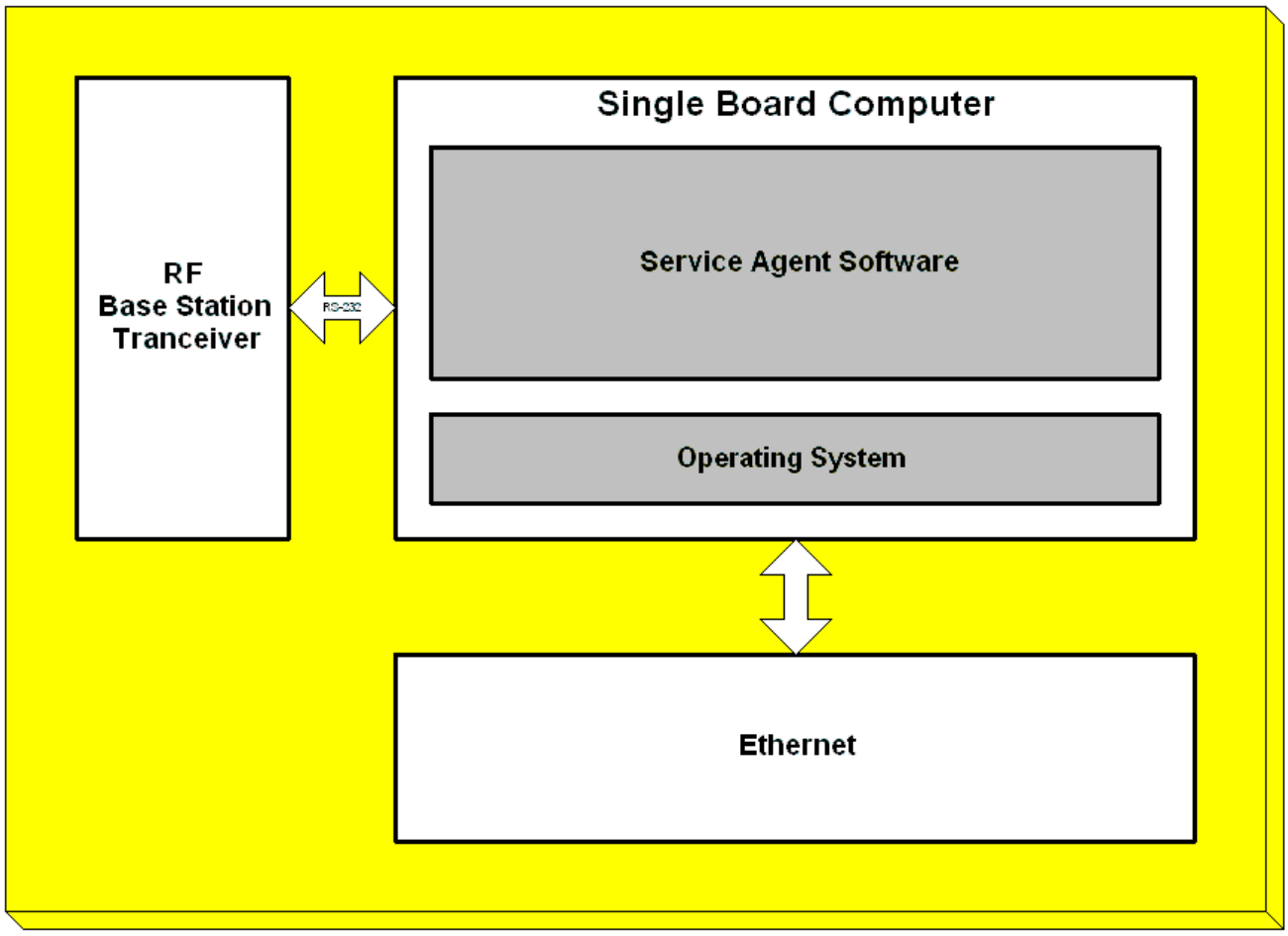
GATEWAY DESCRIPTION

The gateway is the central point for data collection and transmission to the web based portal. The gateway is comprised of several separate sub-systems. It contains a power supply, a single board computer, and a base station radio. The power supply is a medical grade UL rated 120/240V AC power supply with on board overvoltage and overcurrent protection. The single board computer is a PC 104 form factor running Linux operating system. It provides a serial port for direct access. Additionally, it provides Ethernet connectivity to allow data to be sent to the web portal. The base station radio collects all incoming messages from the mesh network. There is an external antenna for the base radio. It then passes this information to the computer. The computer then processes this data eliminates duplicates and transmits via Ethernet. The gateway uses CompactFlash for storage.

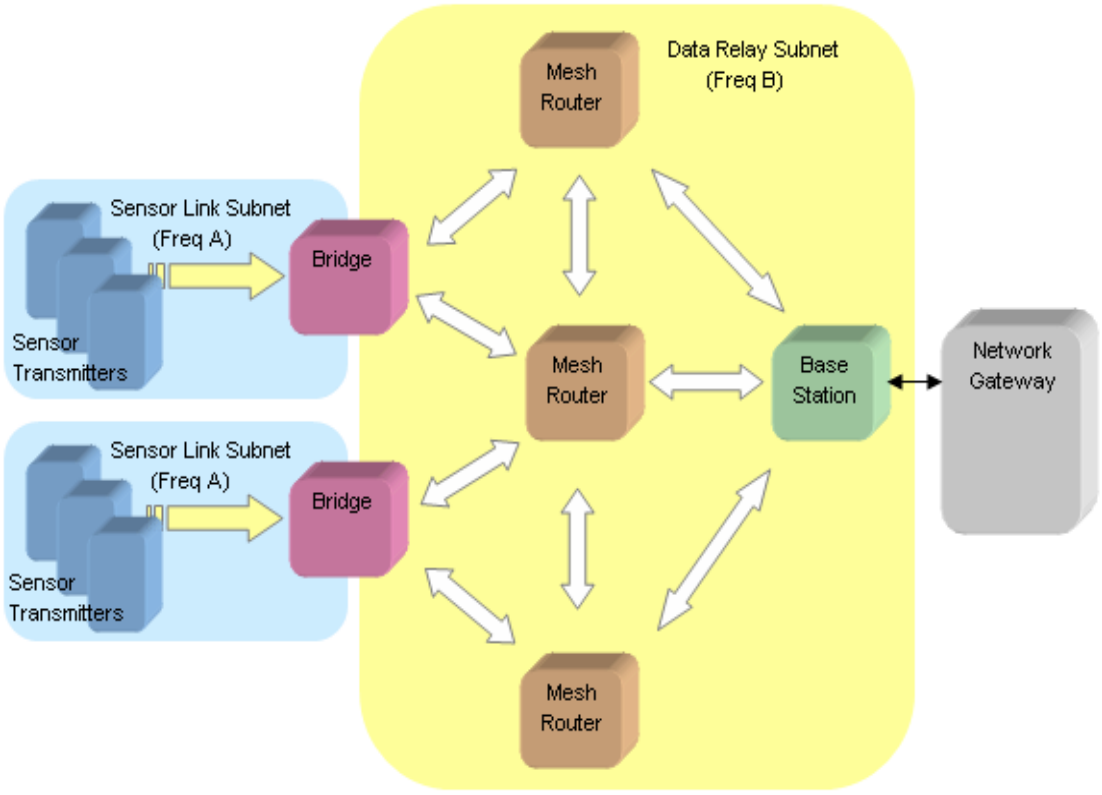
The gateway has two sets of status LED's. One set is used to give status of the mesh network. The second set is used to provide status of the computer and Ethernet connectivity.

The gateway allows for bidirectional communication. The portal is capable of issuing network commands to the gateway to assist in network management. Communication is secure via SSL. Data is also encrypted for provide and additionally layer of security.

Simplified Gateway Diagram



Simplified Network Layout



INTENDED APPLICATION

The InVision™ Wireless Network can be used for any industrial or commercial application that requires overcurrent circuit protection products that has the need to be monitored and notification to the user.

Gateway GTW-1 ELECTRICAL SPECIFICATIONS

Input voltage:..... 120/240 V AC

Input Frequency: ..... 50 – 60 Hz

Power Consumption: ..... 11.5 W

Operating Frequency:.....

IFM Receiver Channel..... 916.5MHz

Mesh Transceiver Channel..... 904.0MHz

THERMAL SPECIFICATIONS

Operating temperature range: ..... -20°C to 50°C

Relative Humidity: ..... 10-95% Non-condensing

MECHANICAL SPECIFICATIONS

Dimensions**:** ..... 12.4” x 2.875” x 7.5”

Enclosure Material**:** ..... Cold Rolled Steel, Powder Coated

Weight: ..... 3.0 pounds

HANDLING & STORAGE SPECIFICATIONS

Storage Temperature: ..... -40°C to 85°C

FCC Labels and Notices

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause and harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: This devices operates under part 15 of the FCC rules. Any modification to this device not expressly authorized by Cooper Bussmann, Inc. may void the user's authority to operate this device.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help

This product specification is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any product. Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

For the current revision of this document please contact the person(s) below.

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