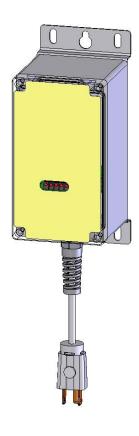
Cooper Bussmann, Inc. 114 Old State Rd. Ellisville, MO 63021-5942 (314) 394-2877 FAX (314) 527-1480



# PRELIMINARY SPECIFICATION

# InVision Wireless Network Bridge Router/Mesh Router Designer Specifications April 25, 2006



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#### SYSTEM DESCRIPTION

The Bussmann Genesis 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.

One of the advantages of the system is that it is highly scalable. Up to 10,000 device sensors can be monitored.

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. The BTR-1 is certified for operation under FCC 15.249 regulations

#### **BRIDGE ROUTER DESCRIPTION**

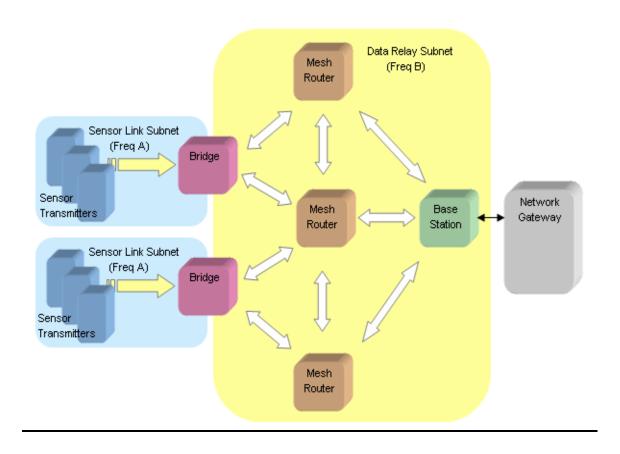
The bridge router acts as a collection point for the data. The sensors transmit data on a specified frequency. The bridge router collects this data and processes it and re-transmits the data on a different frequency. By using two different frequencies the system can listen and talk at the same time. The electronics are housed in a NEMA 4X enclosure. The unit contains an internal antenna to make the installation hassle free. Unit also uses a UL listed cord set and liquid tight strain relief rated. Status of the unit can be view via LEDs viewable on the enclosure face.

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# **Simplified Network Layout**



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# **INTENDED APPLICATION**

The Genesis 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.

#### **ROUTER/BRIDGE ELECTRICAL SPECIFICATIONS**

Input voltage:	.120 V AC
Input Frequency:	.50 – 60 Hz
Power Consumption:	.10mW
Operating Frequency:	•
IFM Receiver Channel	.916.5MHz
Mesh Transceiver Channel	.904.0MHz

#### THERMAL SPECIFICATIONS

Operating temperature range:	20°C to 85°C
Relative Humidity:	10-95% Non-condensing
Class of Protection:	IP20

#### **MECHANICAL SPECIFICATIONS**

Dimensions: 3.5" x 3.5" x 6.3"		
Enclosure Material:	Polycarbonate – UL94 5V	
Weight:	1.3 pounds	

#### **HANDLING & STORAGE SPECIFICATIONS**

Storage	Temperature:.		-40°C to	35°C
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# **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.

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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