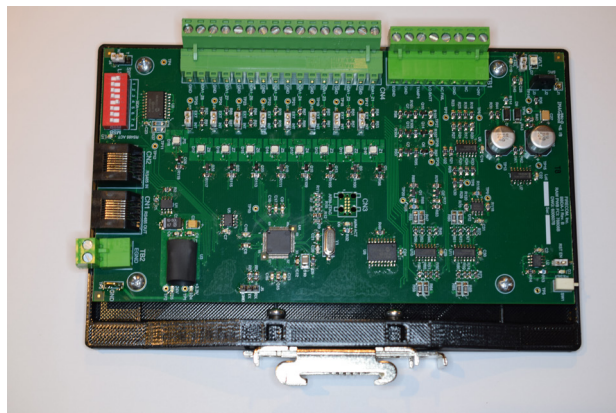


## Features

- ▶ Microprocessor Controlled
- ▶ 8 Hardwired Style B (Class B) Monitoring Circuits
- ▶ Diagnostic LEDs indicate the state of each Monitoring Circuit
- ▶ Intelligent Power Supply Monitoring Interface
- ▶ Ground Fault Monitoring
- ▶ Cabinet Tamper Monitoring
- ▶ Convenient DIN-Rail Mounting



## Description

The BBZ8BPS-1 Zone Input and Power Supply Supervision Module is an option card to the BBCPU-1 Central Processing Unit of a BDA Buddy Monitoring Cabinet. The BBZ8BPS-1 provides up to 8 configurable Style B (Class B) monitoring circuits that can be wired to detect the state of form-A or form-C relay outputs that represent the supervisory status of bidirectional amplifier conditions.

In addition to its monitoring circuits, the BBZ8BPS-1 can be used as an interface to a PS-7A Intelligent Power Supply. The PS-7A is used to provide battery-backed power to the bidirectional amplifier equipment. An intelligent data connection to the PS-7A allows for the monitoring of multiple power supply and battery back-up conditions. When configured as an interface to the PS-7A, the power supply connection can be used to deliver power to the contents of the BBCPU-1 based data gathering panel.

## Application

The BBZ8BPS-1 Zone Input and Power Supply Supervision Module is used to sense BDA status, monitor the state of the power supply and batteries of the BDA Buddy data gathering panel, and detect ground fault and cabinet tamper conditions related to the data gathering panel. When multiple bidirectional amplifiers are powered by additional PS-7A Intelligent Power Supplies, BBZ8BPS-1 units may be employed to monitor all power supplies and batteries used by the entire life safety radio installation.

## Approvals and Listings

Underwriters Laboratories (File No. PENDING)



# Engineering Specifications

The BBZ8BPS-1 is required to be installed within a NEMA-4/UL50E enclosure as an option card to the BBCPU-1. Communication between the v-1 and the BBCPU-1 shall occur upon a direct or “daisy=chained” link of short CAT-6 cable with RJ-45 connections on each end. The communication link between the BBZ8BPS-1 and the BBCPU-1 shall be supervised for integrity.

The current limited zone monitoring circuits shall be configurable to monitor the following BDA status conditions:

- Bidirectional Amplifier Fail
- Donor Antenna Disconnect
- Donor Antenna Signal Reception Supervision
- Bidirectional Amplifier AC Fail
- Bidirectional Amplifier Low Battery Capacity
- Bidirectional Amplifier Charger Fail
- Bidirectional Amplifier Battery Missing
- Backup Generator Active

The power supply related bidirectional amplifier monitoring circuits shall be used when the bidirectional amplifier provides its own dedicated power supply.

Each BDA monitoring circuit shall be supervised by the use of a 15K ohm end of line resistor device that must be installed at the bidirectional amplifier’s relay connections. An optional zone configuration shall allow a 5K ohm in line resistor device to be installed on the positive side of the circuit, where it leaves the BBZ8BPS-1. This option allows for both open and short trouble conditions to be monitored and indicated in addition to the normal, active and trouble open conditions that the standard Style B circuit provides.

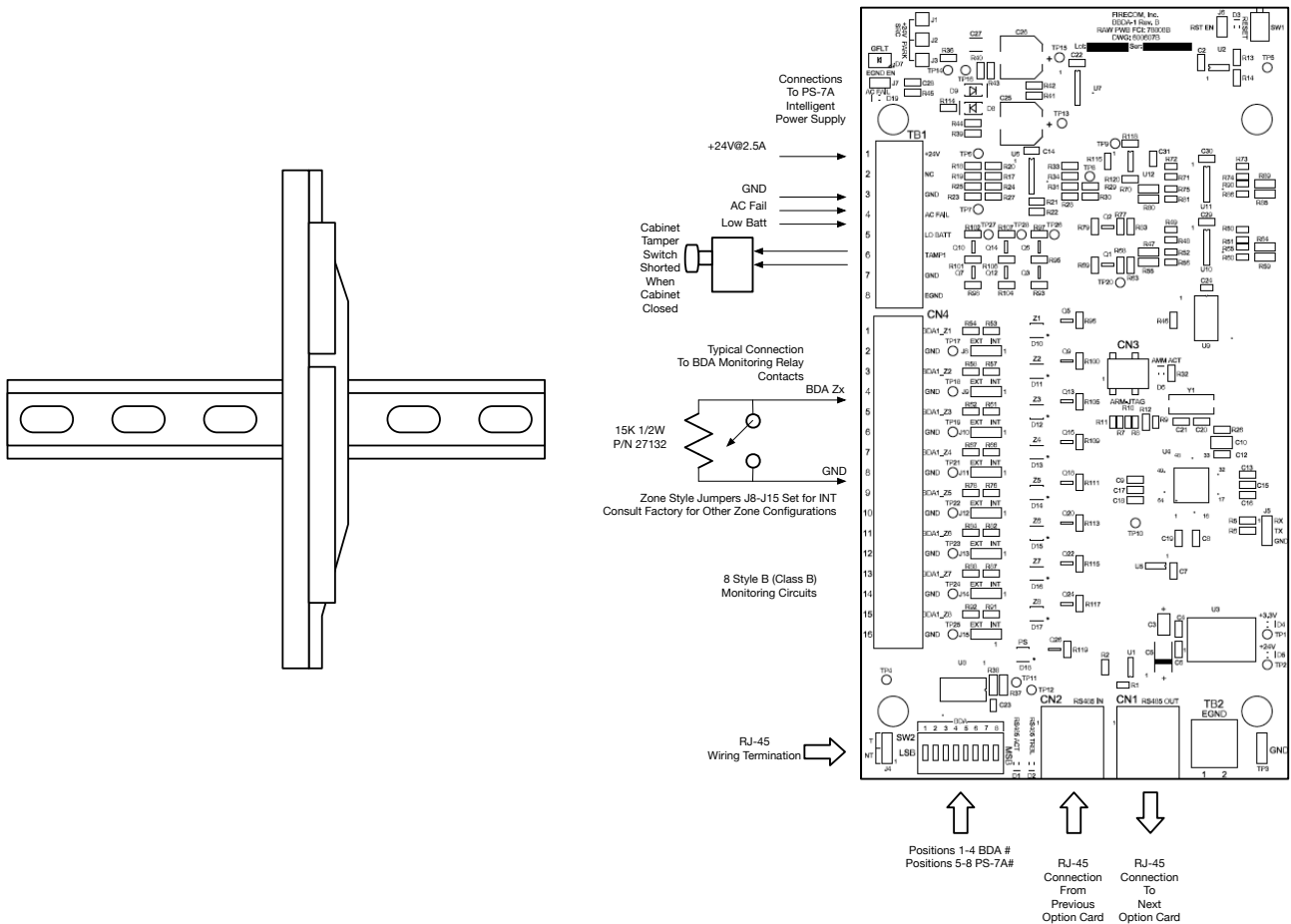
Each of the BDA monitoring circuits shall be monitored for ground fault conditions.

When a PS-7A Intelligent Power Supply is connected and configured for use with the BBZ8BPS-1, power shall optionally be delivered to the circuitry of the BBCPU-1 based data gathering panel. When connected to a PS-7A, the BBZ8BPS-1 shall detect and report the following status conditions:

- AC Fail
- Low Battery Capacity
- Charger Fail
- Battery Missing
- Battery Bad
- Power Supply Output Voltage Error
- Cabinet Tamper
- Ground Fault
- Charger Enabled/Disabled State

# Installation

The BBZ8BPS-1 clips on to a standard DIN mounting rail, installed within a NEMA-4/UL-50E enclosure. The BBZ8BPS-1 connects to the BBCPU-1 and other option cards using short CAT-6 cables with RJ-45 connectors on each end.



# Electrical Specifications

Operating Voltage	24V
Operating Current	50mA
Zone Operating Voltage	0-24VDC
Monitoring Zone Voltage Ripple Rating	400mV p-p
Monitoring Zone Supervisory Current	1mA Maximum
Monitoring Zone Alarm Current	3mA Maximum
Monitoring Zone Maximum Capacitance	10uF
Monitoring Zone Maximum Resistance	100 Ohms
Operating Temperature	0°C to 49°C
Operating Relative Humidity Range	0% to 93% @ 32°C

# Ordering Information

Model No.	Part No.	Description
BBZ8BPS-1	79183	8 Class B Zone and Power Supply Supervision Module

It is our intention to keep the product information up to date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information contact: FIRECOM, INC.

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