

## Features

- ▶ Microprocessor Controlled
- ▶ Distributed Intelligent Network Node
- ▶ Echelon LonTalk Communications using Free Topology FTT-10 Technology
- ▶ Capable of Powering One or More BBGUI-1 Graphical User Interfaces
- ▶ Diagnostic LEDs
- ▶ MicroSD Card Interface
- ▶ Convenient DIN-Rail Mounting



## Description

The BBCPU-1 Central Processing Unit is the foundational element of a BDA Buddy data gathering panel cabinet. The BBCPU-1, in conjunction with its associated option cards, collects status information from one or more bidirectional amplifiers, associated power supplies, and distributed antenna elements. Supervisory status information is then displayed upon one or more BBGUI-1 Graphical User Interfaces, allowing quick and easy analysis of the health of all of the life safety radio communication equipment by Firefighters, building personnel, and field technicians. Summary status can also be forwarded to a central station monitored fire alarm system via industry-standard form-C relay contacts.

The BBCPU-1 contains database configuration that instructs it how to respond to status change inputs and generate messaging outputs. The BBCPU-1 communicates with its peer nodes on a twisted pair network. This allows inputs and outputs to be processed in a distributed manner across the network.

## Application

The BBCPU-1 is required to be installed within a NEMA-4/UL50E enclosure with its option cards. Option cards are configured to monitor status items from up to four bidirectional amplifiers, up to four power supplies, and up to 125 supervised life safety antennas. The BBCPU-1 provides a current limited output to power one or more remote annunciators. The BBCPU-1 is capable of controlling form-C relays to indicate summarized status to other concerned equipment such as a central station connected fire alarm control panel.

## Approvals and Listings

Underwriters Laboratories (File No. PENDING)



# Engineering Specifications

The BBCPU-1 shall be required to be installed in a BDA Buddy “data gathering panel”, along with its associated option cards and will monitor multiple life safety radio communications systems and transmit a summarized status via form-c relays to central station connected monitoring equipment. Communication between the BBCPU-1 and its option cards shall occur upon links of CAT-6 cable with RJ-45 connections on each end. The communication link between the BBCPU-1 and the all option cards shall be supervised for integrity.

The BBCPU-1 shall support up to four BBZ8BPS-1 Zone Modules, one BBR8C-1 Relay Modules, and one BBAS-1 Antenna Supervisor Module.

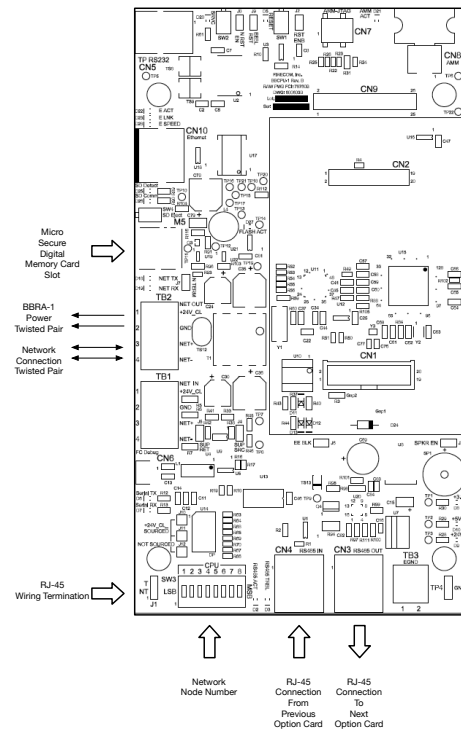
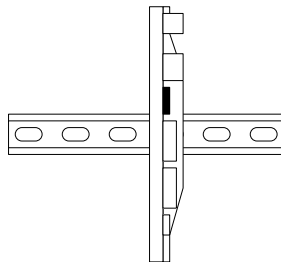
The BBCPU-1 shall contain the necessary portions of a system wide database that allows it to operate upon global system state changes, while allowing independent operation in the event of a network disconnection.

Communications between this microprocessor controlled intelligent node and other nodes within the system shall be via Echelon LonTalk Free Topology communications. The BBCPU-1 shall provide a connection for twisted pair network wiring from the BBCPU-1 to one or more BBGUI-1 Graphical User Interfaces as well as other data gathering panel cabinets with a BBCPU-1 installed within it. This interconnecting network shall be monitored for integrity.

The BBCPU-1 shall provide an optional current limited source of 24VDC power for one or more BBGUI-1 Graphical User Interfaces. Ground fault shall be detected on this power source wiring.

# Installation

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



# Electrical Specifications

Operating Voltage	24V
Operating Current	130mA
Operating Temperature	0°C to 49°C
Operating Relative Humidity Range	0% to 93% @ 32°C

# Ordering Information

Model No.	Part No.	Description
BBCPU-1	79184	Central Proc Unit

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.

**FIRECOM™, INC.**  
 3927 59th Street  
 Woodside, NY 11377  
 718.899.6100 TEL  
 718.899.1932 FAX



[WWW.FIRECOMINC.COM](http://WWW.FIRECOMINC.COM)

78763  
 Rev 20201105  
 Pg 2 of 2