



**ALARM SAF**

**BEACON Power Management**

*INTEGRATING FIRE AND ACCESS*

**BN10-002-UL**

**12/24 VDC, 10 Amp**

**Fire/Access Power Management System**



**12/24 VDC, 10 Amp** regulated power supply designed to manage power in access control and fire systems for full integration of life-safety building systems.

**Unique and versatile**, this off-line switching power supply features supervised outputs, broad fault detection and reporting, FACP egress control, interface to FACP addressable modules, battery presence supervision and continuous monitoring of internal system and battery charging operations.

**Applications include** Fire Alarm Interface (FAI) for emergency egress, elevator recall and alarm monitoring, power for access control systems, FACP, auxiliary devices and door electronics and mag lock control.

**UL Listed** to the latest releases of UL 1481, UL 294. Optional system accessory modules available.

### AGENCY LISTINGS

- UL1481
- UL294

### CODE COMPLIANCE

- NFPA 72
- NFPA 731
- CSFM
- NY MEA
- FCC Part 15, subpart B, class A

### GENERAL SYSTEM FEATURES

- 12/24 VDC, user selectable
- Multiple power supply outputs individually fused and supervised
- High surge current capability
- Continuous monitoring of:
  - Internal System Operation
  - Battery Charging System
- Short circuit protection
- Thermal protection
- Dual rate controlled current battery charging
- Solid state battery transfer
- Visual fault & status indication
- Relay fault output
- Reverse polarity protection
- Minimal current draw in standby mode
- Surge current available for initial activation of:
  - Magnetic locks
  - Smoke dampers
  - Door holders
- Zero voltage drop on battery transfer
- Instant switch over to battery standby
- Interface to FACP addressable modules through either:
  - Voltage output
  - Relay output
  - Open collector output
- Battery presence supervision or optional battery presence disconnect
- Limited lifetime warranty

### INSTALLATION / SERVICE FEATURES:

- Removable terminal strips
- Connector for primary AC input allows for safe disconnect
- Automotive Blade Fuses for improved reliability
- Tamper switch included
- Small cabinet for reduced wall space
- Lightweight

# BN10-002-UL 12/24 VDC, 10 Amp Fire/Access Power Management System

## POWER SUPPLY SPECIFICATIONS

### Input specifications:

- Input voltage: 120 VAC or 230 VAC
- Input current: 2.75A
- Input voltage frequency: 60 Hz

### Output specifications:

- Output voltage: 12 or 24 VDC, user selectable
- Output current rating: 20 A @ 12 VDC or 10 A @ 24 VDC
- Ripple: < 1 % RMS
- Current draw in standby mode: < 60 mA
- Electronically regulated and filtered output

### Output Configurations:

- 1 constant DC output
- 1 FACP controlled output; energized on FAI
- 1 FACP controlled output; de-energized on FAI

### Fire Alarm Interface (FAI) Requirements:

- Trip voltage range: 9 to 33 VDC
- Current draw from FACP: 4 to 15 mA

### Temperature Ratings:

- Operating temperature: 0 C° to 49 C°
- Humidity: 93% @ 32 C°, indoor, dry
- BTU/hr: 157

### Battery Back-up Specifications:

- Battery charge chemistry: sealed lead acid rechargeable
- Maximum battery charge capacity: 36 Ah

### Fault Detection; Relay Contact Output:

- Low/No AC
- High/Low DC
- Blown fuse
- Battery presence

### Visual Indicators:

- System trouble: Yellow LED
- AC power: Green LED
- AC trouble: Yellow LED
- Constant DC output OK: Green LED
- FACP controlled output OK: Green LED
- FAI activated: Red LED
- Reversed battery: Yellow LED

## MECHANICAL SPECIFICATIONS

### BN10-002-UL:

- Vented cabinet: 12"L x 12"W x 4"D, 10 lbs

### BN10-003-UL:

- Vented cabinet: 11"L x 15"W x 4"D, 15 lbs
- Battery space: two 7 Ah or two 12 Ah batteries

### BN10-004-UL:

- Vented cabinet: 15"L x 18"W x 4"D, 21 lbs
- Battery space: two 7 Ah, two 12 Ah or two 17 Ah batteries

## APPLICATIONS

### Fire System Applications:

- Fire alarm interface for emergency exit
- Smoke detectors (re-settable)
- Door holders
- Auxiliary equipment
- Elevator recall
- Smoke dampers
- Mass Notification Systems

### Access Control Applications:

- Access control system power
- Fire alarm interface for emergency exit
- Door strikes
- Mag locks
- Card readers
- Proximity readers

ORDER NUMBER	MODEL NUMBER	DESCRIPTION
ORDER INFO		
10035	BN10-002-UL	12/24 VDC, 10 A power supply Key lockable cabinet
10099	BN10-002-UL-E240	240 VAC, 12/24 VDC, 10 A power supply, Key lockable cabinet
10036	BN10-003-UL	12/24 VDC, 10 A power supply Large key lockable cabinet
10076	BN10-004-UL	12/24 VDC, 10 A power supply Extra large key lockable cabinet
10034	BN10-000-UL	12/24 VDC, 10 A power supply replacement board

## SYSTEM ACCESSORY MODULES

10041	PD8	8 PTC outputs, power distribution board
10042	PD8F	8 fused outputs, power distribution board
10067	MB8	8 PTC outputs, Multi-Buss, power distribution board
10068	MB8F	8 fused outputs, Multi-Buss, power distribution board
10069	CMB8	4 relay controlled and 4 selectable PTC outputs, Multi-Buss power distribution board
10070	CMB8F	4 relay controlled and 4 selectable fused outputs, Multi-Buss power distribution board
10066	SPS4	Secondary power source module



**ALARM SAF**

6 Ledgerock Way, Unit 7, Acton, MA 01720, 978.658.6717, [www.alarmsaf.com](http://www.alarmsaf.com)