



**ALARM SAF**

**BEACON Power Management**

INTEGRATING FIRE AND ACCESS

## BN4-002-PD8-UL 12/24 VDC, 4 Amp, 8 Output Fire/Access Power Management System



**12/24 VDC, 4 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. The system also provides 8 individually PTC power limited outputs.

**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
- NEC Article 725, Class 2 Power Limiting
- FCC Part 15, subpart B, class A

### GENERAL SYSTEM FEATURES

- 12/24 VDC, user selectable
- Multiple power supply outputs individually fused and supervised
- 8 Class 2 power limited power distribution outputs
- 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
- Battery presence supervision or optional battery presence disconnect
- 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
- Limited lifetime warranty

### POWER DISTRIBUTION FEATURES:

- 8 Class 2, Power limited outputs, PTC protected
- Visual Status Indication

### INSTALLATION / SERVICE FEATURES:

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

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## POWER SUPPLY SPECIFICATIONS

### Input specifications:

- Input voltage: 120 VAC or 230 VAC
- Input current: 1 A maximum
- Input voltage frequency: 60 Hz

### Output specifications:

- Output voltage: 12 or 24 VDC, user selectable
- Output current rating: 8 A @ 12 VDC or 4 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: 71

### 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

## POWER DISTRIBUTION SPECIFICATIONS

- 8 Class 2 power limited power distribution outputs
- Output current: power limited @ 1.5 A per output, PTC protected

## MECHANICAL SPECIFICATIONS

- Vented cabinet: 12"L x 12"W x 4"D, 10 lbs
- Battery space: two 7 Ah or two 12 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 INFO

ORDER NUMBER	MODEL NUMBER	DESCRIPTION
10005	BN4-002-PD8-UL	12/24 VDC 4 A power supply 8 power limited outputs Key lockable cabinet
10002	BN4-000-PD8-UL	12/24 VDC 4 A power supply replacement board with on-board PD8-UL module
10001	BN4-000-UL	12/24 VDC 4 A power supply replacement board
10041	PD8-UL	8 power limited output power distribution replacement module

