

# BN4-000-UL, BN6-000-UL, BN8-000-UL, BN10-000-UL



These unique and versatile off-line switching power supplies are available in several current levels and will supply regulated and filtered main, standby or auxiliary power to access control and fire system panels, components and devices.

Beacon Power Supplies combine with a variety of accessory modules to manage power in access control and fire systems for full integration of life-safety building systems. Standard configurations are available or systems can be customized to meet any application requirement.

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

# **BEACON Power Supplies**

**INTEGRATING FIRE AND ACCESS** 

## **AGENCY LISTINGS**

- UL1481
- UL294

### **CODE COMPLIANCE**

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

### **POWER SUPPLY 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
- Plug-in Connectors for primary AC input and power distribution allows for safe and easy connect/disconnect
- Automotive Blade Fuses for improved reliability
- Most accessory modules mount directly to Beacon Power Supply

# BN4-000-UL, BN6-000-UL, BN8-000-UL, BN10-000-UL

## POWER SUPPLY SPECIFICATIONS

### Input specifications:

- Input voltage: 120 VAC or 230 VAC
- Input current:
  - **BN4 -** 1 A
  - BN6 1.6 A
  - BN8 2.1 A
  - BN10 2.75 A
- Input voltage frequency: 60 Hz

#### **Output specifications:**

- Output voltage: 12 or 24 VDC
- Output current rating:
  - **BN4** 8 A @ 12 VDC or 4 A @ 24 VDC **BN6** - 12 A @ 12 VDC or 6 A @ 24 VDC **BN8** - 16 A @ 12 VDC or 8 A @ 24 VDC **BN10** - 20 A @ 12 VDC or 10 A @ 24 VDC
- Ripple: < 1 % RMS
- Current draw in standby mode: < 60 mA
- Electronically regulated and filtered outputs

#### **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:
  - **BN4 -** 71
  - **BN6 -** 99
  - **BN8 -** 128
  - **BN10 -**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

**BN4 -** 8.85" L x 6.45" W x 2.00" H **BN6 -** 8.85" L x 6.45" W x 2.00" H **BN8 -** 8.85" L x 6.45" W x 3.10" H **BN10 -** 8.85" L x 6.45" W x 3.10" H

## **BEACON ACCESSORY MODULES**

MODEL NUMBER	DESCRIPTION	
PD8	8 class 2 power limited, distributed outputs	
PD8F	8 individually fused, distributed outputs	
MB8	8 class 2, power limited outputs, selectable for FAI & voltage	
MB8F	8 individually fused outputs selectable for FAI & voltage	
CMB8	4 relay controlled & 4 uncontrolled class 2, power limited outputs, selectable for FAI & voltage	
CMB8F	4 relay controlled & 4 uncontrolled individually fused outputs, selectable for FAI & voltage	
APD8	8 programmable, relay controlled, class 2, power limited outputs	
APD8F	8 programmable, relay controlled, individually fused outputs	
SPS4	Secondary Power Source Module: 5-18V @ 4A	

## **BEACON CABINETS**

MODEL NUMBER	DIMENSIONS ( H x W x D)
BC-02	12" x 12" x 4"
BC-03	11" x 15" x 4"
BC-04	15″ x 18″ x 4″
BC-09	24" x 20" x 5"

All cabinets are painted steel and are vented and key lockable

## **ORDER INFO**

ORDER NUMBER	MODEL NUMBER	DESCRIPTION
10001	BN4-000-UL	12/24 VDC, 8/4 A power supply board
10013	BN6-000-UL	12/24 VDC, 12/6 A power supply board
10025	BN8-000-UL	12/24 VDC, 16/8 A power supply board
10034	BN10-000-UL	12/24 VDC, 20/10 A power supply board