

SAFE-BBU-1000/2000 Battery Backup Unit

UL 2524 Certified, Meets NFPA 1221/1225 Requirements for Backup Power



Providing 12 and 24-Hour Backup Power

Our battery backup unit (BBU) features our state-of-the-art battery technology, designed to enhance performance and convenience versus legacy lead-acid or lithium-ion batteries.

- Lithium Iron Phosphate (LiFePO4) batteries provide compact and lighter-weight energy storage.
- More environmentally friendly than Lithium Ion, our batteries do not contain cobalt or other toxic chemicals and are less likely to overheat.
- Features low self-discharge, no outgassing and no memory effect.
- The system monitors and prevents both overcharge and over-discharge of the batteries, with overcurrent protection.
- Battery cell balancing circuitry extends the life of the battery and maximizes capacity.



SAFE-BBU-1000 shown above

Model SAFE-BBU-1000 (1 battery pack)

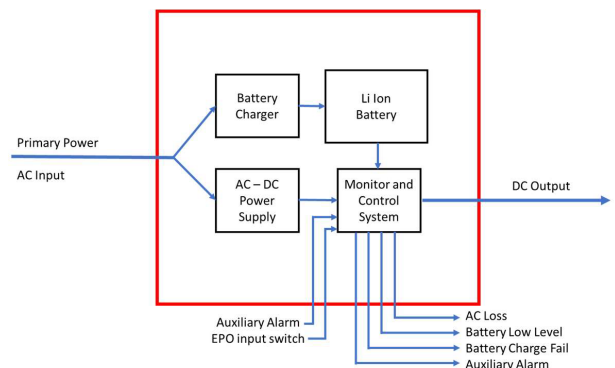
| | |
|-------------------------------------|---|
| Input | 120 VAC |
| Output power | 9 - 12 VDC (max = 10 amps at 12 VDC) |
| Alarm outputs | Active low: 0 to 5V |
| Backup duration | 12 or 24 hours |
| Weight (Enclosure + battery) | 32 lbs |
| Dimensions | 15 x 12 x 6.7 inches |
| Enclosure | NEMA 4 |

Model SAFE-BBU-2000 (2 battery packs)

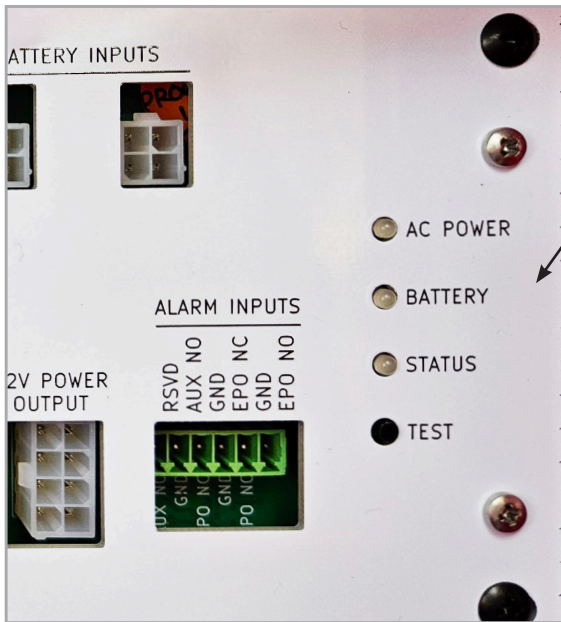
| | |
|---------------------------------------|---|
| Input | 120 VAC |
| Output power | 9 - 12 VDC (max = 10 amps at 12 VDC) |
| Alarm outputs | Active low: 0 to 5V |
| Backup duration | 24 hours |
| Weight (Enclosure + batteries) | 44 lbs |
| Dimensions | 19 x 18 x 6.7 inches |
| Enclosure | NEMA 4 |

Additional Operating Features

- Integrated AC power supply offers smooth transition from AC power to battery power.
- Master external power-off switch (EPO) allows for one-button BDA disabling.
- An auxiliary alarm input (AUX) is provided to connect room door sensor or a motion detector into the alarm annunciator.
- NFPA alarm outputs for AC power loss, battery charge failure, battery level low and auxiliary alarm.
- Connects to BDA via 2m/6.5ft cable (provided).
- Operating temperature is 14 to 122F (-10 to 50C).



LED Indicators



Internal view, close up of LED indicators

| STATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------|---|---|---|---|---|---|---|---|---|
| AC POWER | ● | ● | ● | ● | ● | ○ | ○ | ○ | ● |
| BATTERY | ○ | ○ | ● | ● | ○ | ○ | ○ | ● | ● |
| STATUS | ● | ● | ● | ● | ● | ● | ● | ● | ● |

State Descriptions

1. AC on, battery charging/balancing.
2. AC on, battery charged.
3. AC off, battery powered.
4. AC on, charger failure (not connected).
5. AC off, low battery voltage: (slow red/green flash).
6. External AUX alarm active.
7. External EPO engaged.
8. Battery over current.
9. Battery error: fast flashing (battery and status LEDs indicate blown fuse or cell out of range).

○ Grey Circle indicates LED off.

○ White Dotted Circle indicates LED may flash red or green depending on current state when alarm occurred.

● Dashed Circle indicates flashing LED.

Ports and Connections

