

## Ordering

Model No.	Mechanical
B100	Size: 4" x 2.5" x 1.5" Weight: .25 lb.

*Provided with cables and mounting hardware*

## Agency Listings

*Product listed for use in LifeSafety Power equipment*

USA	CANADA
UL 294	ULC S318
UL 603	ULC S319
UL 1076	CSA C22.2 #107.1
FCC Part 15, Subpart B	CSA 22.2 #60950
CSFM Approved	



## Product Overview

The B100 secondary voltage module provides a means to easily and economically add an additional voltage to any FlexPower system. Primary power for the B100 is derived from an FPO power supply and the B100 steps the FPO voltage down to the user defined range (typically 12VDC\*).

The B100 terminal block output is Class 2 power limited and jumper selectable for either a fixed 12VDC or an adjustable range between 5-18VDC at 4 amps maximum current. Multiple B100's can be added to a system for virtually unlimited voltage combinations.

*\*See B100 user manual for complete capability*

## Specifications

Parameter	Rating
<b>Input Voltage</b> (from FPO power supply)	12 or 24 VDC
<b>Output Voltage</b> (jumper select)	12VDC or 5-18VDC (user adjustable)
<b>Output Current</b> (Class 2 Power Limited)	4 Amps
<b>Efficiency</b>	91%
<b>Output Ripple</b> (12V@4A)	82 mVp-p
<b>Line Regulation</b> (12V@4A)	<0.1±%
<b>Load Regulation</b> (12V)	0.56 ±%

*\*Input voltage must be a minimum of 3V higher than output voltage*

## Features and Functions

### Programmable output voltage

- ◆ Jumper selectable output voltage
  - 12VDC fixed
  - 5 to 18VDC user adjustable
- ◆ 4 Amps current at any selected voltage

### On-board protection

- ◆ Over load protection
- ◆ Short circuit protection
- ◆ Over temperature protection

### Fault reporting (to host power supply)

- ◆ Abnormal operation
- ◆ Voltage loss
- ◆ Over current

### Visual Indicators

- ◆ DC in / DC out and Fault
- ◆ Input and output LEDs indicate voltage by color (<15V Green, >15V Blue)

### Benefits

- ◆ Adds an economical secondary 12V output to any 24VDC system
- ◆ Provides the odd voltage required to power modems, routers and other IT or similar devices (ie., 5V, 9V, 15V etc)
- ◆ Snap-in style mounting standoffs with fast-on connect cables for easy field installation
- ◆ Eliminates need for a 12V battery set in dual voltage access power systems
- ◆ Small size allows dual voltage in a smaller enclosure

### Lifetime Warranty

- ◆ High efficiency circuit of greater than 90% provides less heat generation leading to a longer service life and lower MTBF



**FLEXPOWER Standard Features**

**FlexConnect®** Power supply and accessory board interconnection system uses common mounting footprints, predrilled mounting holes, snap-in standoffs, pluggable wires, and a dual buss distribution architecture to simplify installation and service.

**Reliability+®** FPO power supplies are fully fault protected and feature fiberglass printed circuit boards to protect the electronics from water and other corrosive elements found in industrial settings. High efficiency design promotes low heat generation leading to longer service life.

**GreenSmart®** FlexPower systems are RoHs compliant, lead-free, and meet the latest state, federal and European requirements for energy efficiency.

**Expansion** This module is typically part of an existing system or purchased to expand an existing system.

**Fault Detection** A blown fuse or loss of output voltage will be detected and reported to the host FPO power supply.

**OutSmart™** Visual Voltage Verification - Output LED changes color based on voltage setting (12V/Green, 24V/Blue)

**Flexibility** This module may also be used to add multiple output voltages to an existing system that currently does not feature these functions. See the instruction manual or application notes for more information.

This module may be added to any existing FlexPower system without restrictive agency listing issues.

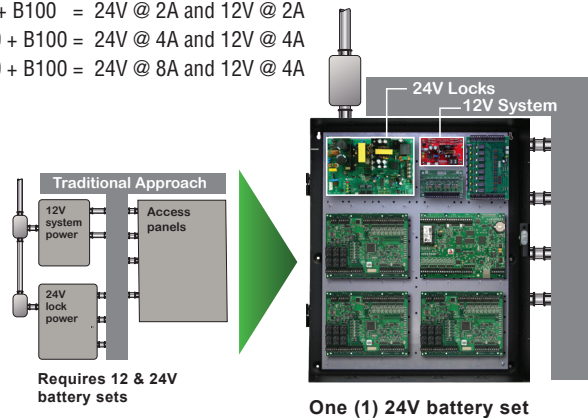
**B100 access power**

The B100 is a perfect solution to the common problem of configuring an economical dual voltage power system for an access control system. The B100 eliminates the need for a second power supply and cabinet to configure a dual voltage system.

By combining an FPO of appropriate size for 24V lock power and a B100 for 12V system power, all power components are located in one enclosure for efficiency of cost, space, interconnection, and the ability to use a single battery set for backup of both output voltages.

**FPO / B100 Power Pairings:**

- FPO75 + B100 = 24V @ 2A and 12V @ 2A
- FPO150 + B100 = 24V @ 4A and 12V @ 4A
- FPO250 + B100 = 24V @ 8A and 12V @ 4A



**B100 multiple system voltages**

This example shows a system designed to produce 3 simultaneous voltages to power an IT modem with 5VDC, an IT router at 9VDC, and have 24VDC available to charge a battery set and provide for miscellaneous system functions.

- ◆ 5V@.5A = 2.5W
  - ◆ 9V@1A = 9W
  - ◆ 24V@2A = 48W
- 60W Total



A system made up of one FPO75 set to 24V, one B100 set to 5V, and one B100 set to 9V will satisfy the system requirement. All equipment will fit within an E1 enclosure and requires only a 24V battery set to backup all generated voltages.

The part number would be *FPO75 - 2B100 E1*

**LifeSafetyPower.com**

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