



### ELECTRICAL RATINGS

Parameter	Rating	Unit
Input Voltage	12 or 24	VDC
Output Voltage	12/5-18*	VDC
Output Current (Class 2 Power Limited)	4	Amps
Efficiency (12V@4A)	91	%
Output Ripple (12V@4A)	82	mVp-p
Line Regulation (12V@4A)	<0.1	±%
Load Regulation (12V@4A)	0.56	±%

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

### DESCRIPTION

The B100 DC to DC converter provides a means to add additional voltages to a FlexPower system utilizing a single, system, standby battery set.

Each unit provides a single output voltage of either 12VDC or an adjustable voltage between 5 and 18VDC and is typically used in a FlexPower power system to generate voltages consistent with modems, routers, and other IT or similar devices, when battery standby is necessary.

Output current is rated for 4 Amps and the output is rated Class 2, power limited.

Primary power for this device is provided by any FPO power supply of sufficient power level.

Multiple B100 units may be used with a single FPO power supply.

See Application Note AN07 for further information.

### BENEFITS

- Member of the **FlexPower** Product Family
  - ◆ **FlexConnect** Dual voltage bus and prerewired cables connect the B100 to the power supply or additional accessory modules
  - ◆ **VSelect** Provides installer selectable output voltage, either 12VDC or 5 to 18V adjustable
  - ◆ **Reliability+** Fiberglass PCB for improved environmental performance, high efficiency operation
  - ◆ **GreenSmart** RoHS compliant
- Listed for Fire, Security, CCTV, Access Control, and Mass Notification
- High efficiency circuit, greater than 90%, provides increased battery life and less heat generation leading to a longer service life and lower MTBF
- High surge current capability
- Fault detection reports to host power supply
- Plug and play modular design improves serviceability
- Quality controlled manufacturing process
- Ten year warranty

### AGENCY LISTINGS

Product listed for use in  
LifeSafety Power equipment

#### USA

UL 294 UL 1481  
UL 603 UL 2044  
UL 864 UL 2572  
UL 1076  
FCC Part 15, Subpart B  
CSFM Approved

#### CANADA

ULC S318  
ULC S319  
ULC S527  
CSA C22.2 #107.1  
CSA 22.2 #60950



**FLEXPOWER® FEATURES**

**VSelect** One single switch for configuring the output between 12 and 24VDC eliminates field errors and allows for the reduction and simplification of service inventory by eliminating the necessity of stocking units in each voltage.

**FlexConnect** The FlexPower series provides a prewired interconnection system between the power supply and accessory boards of the power system that introduces the concept of a dual voltage bus structure throughout all system modules and eliminates intermodule wiring by the field installer.

Field upgrading or expansion is as simple as using common mounting footprints, predrilled mounting holes, snap-in standoffs, and pluggable wires to add additional system capability or capacity when needed, all without restrictive agency listing issues.

**Reliability+** All boards within the FlexPower system feature fiberglass printed circuit boards rather than paper-based to protect the electronics from water and other corrosive elements found in industrial settings. High efficiency power supply design promotes low heat generation leading to a longer service life.

**GreenSmart** All members of the FlexPower family 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.

**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.

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

Model No.	Mechanical Information
B100	Size: 4" x 2.5" x 1.5" Weight: .50 lb.

*Provided with Cables, Mounting Hardware*

**B100 MULTI-OUTPUT EXAMPLE**

- ◆ The desired system is required to provide 5V@.5A for an IT modem, 9V@1A for an IT router, and 24V@2A for miscellaneous system functions.
- ◆ 5V@.5A = 2.5W
- ◆ 9V@1A = 9W
- ◆ 24V@2A = 48W
- ◆ Total Watts = 59.5W
- ◆ A system made up of one B100 set to 5V, one B100 set to 9V, and one FPO75 set for 24V will accomplish the system requirement. All equipment will fit within one E1 cabinet.
- ◆ The Part # would be *FPO75-2B100E1*



**FLEXPOWER EXPANSION SYSTEM**

Model Number	Order Number	Description
A8	A02-009	8 output AC power distribution module, fuse protected
A8P	A02-010	8 output AC power distribution module, Class 2 power limited
B100	A03-009	DC to DC converter provides +12VDC and adjustable voltage of 5 to 18VDC, Class 2 power limited
C4	A02-005	4 input, 4 output lock controller, fuse protected
C4P	A02-006	4 input, 4 output lock controller, Class 2 power limited
C8	A02-007	8 input, 8 output lock controller, fuse protected
C8P	A02-008	8 input, 8 output lock controller, Class 2 power limited
D8	A02-001	8 output DC power distribution module, fuse protected
D8P	A02-002	8 output DC power distribution module, Class 2 power limited
F8	A02-003	8 output programmable power distribution module, fuse protected
F8P	A02-004	8 output programmable power distribution module, Class 2 power limited
N24	A04-001	2 Class A, B input, 2 Class A, 4 Class B output NAC module
NL1	A11-001	NetLink communication module

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