



## DESCRIPTION

**FLEXPOWER** is a patented power management system for security and life safety applications.

The FlexPower FPO25 is an offline switchmode power supply-battery charger specifically designed for the lifesafety industry capable of providing two outputs, user selectable for 12 or 24VDC.

One output provides continuous output power and the second is programmable to either fail-safe or fail-secure lock operation, when the on board fire alarm interface is activated.

Complete fault detection and reporting, with programmable fault delays, is provided along with datalogging capability of fault occurrence, battery usage time and current power supply status.

### Agency Listings

UL294, UL603, UL864, UL1076, UL1481, UL2044, UL2572, FCC PART 15, Subpart B ULC S318, ULC S319, ULC S527, CSA C22.2#107.1, CSA 22.2 #60950, CSFM Approved / CE

## FEATURES AND FUNCTIONS

### 12 or 24VDC user selectable

- ◆ 2A continuous or switched at 12VDC
- ◆ 1A continuous or switched at 24VDC

### Fire Alarm Interface (FAI)

- ◆ User programmable fail-safe or fail-secure operation

### Programmable .5A battery charging

- ◆ Independent charging circuit meets stricter UL output tolerance reqts
- ◆ Microprocessor dual rate charging restores battery sets from 4 to 20 Ah
- ◆ Automatic switch over to battery when AC fails

### Protection

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

### Supervision

- ◆ AC Fail (form "C" contacts)
- ◆ System Fault (form "C" contacts) may be triggered by low/no battery, short to earth ground and power supply failure

### Visual Indicators

- ◆ AC input
- ◆ DC1, DC2 output
- ◆ Fire alarm activation
- ◆ AC fault
- ◆ System fault
- ◆ Short to earth ground
- ◆ Reverse battery polarity

### Reporting and Monitoring

- ◆ Programmable AC and System fault delays
- ◆ Fire alarm interface for egress lock control
- ◆ Cumulative AC and System fault counters (user resettable)
- ◆ Total battery service hours (user resettable)
- ◆ Total power supply run-time hours
- ◆ Network or PC reporting of all system conditions
  - Requires DL1 USB cable for PC interface
  - Requires NetLink module for WAN/LAN connection

## ELECTRICAL RATINGS

Parameter	Rating
<b>Input Voltage</b>	120 or 230VAC
<b>Input Power (max)</b>	28 Watts
<b>Output Power</b>	25 Watts
<b>Efficiency</b>	73%
<b>Operating Temperature Range</b>	0 - 49°C (32 - 120°F)
<b>Output Voltage</b>	12 VDC   24 VDC
<b>Output Current</b>	2 Amps   1 Amps
<b>Battery Charge Capacity</b>	20 Amp Hours
<b>Default Charge Current</b>	0.50 Amp
<b>Programmable Charge Current</b>	1A   0.5A   0.25A   0.125A
<b>Output Ripple</b>	120 mVp-p
<b>Line Regulation</b>	± 0.1%
<b>Load Regulation</b>	± 2.5%
<b>BTU Rating</b>	11 BTU/Hr
<b>Continuous Power Outputs</b>	1
<b>Switched Power Outputs</b>	1
<b>Fire Alarm Interface (FAI)</b>	Yes

## Ordering

Model No.	Mechanical Information
FPO25	Size: 4.0" x 6.0" x 2.5" Weight: 1 lb.

*Provided with AC cable and mounting hardware*

## Lifetime Warranty



## FLEXPOWER® STANDARD FEATURES

**SureCharge®** The microprocessor controlled charging process used by the FPO power supply guarantees proper charging current for the battery and the fastest charge time. The constant current charger provides a linear, predictable charge time for any lead acid, gel battery set from 4 to 20 amhours without stress or damage to the battery.

**PowerCom®** LifeSafety Power's proprietary software for power supply monitoring, programming and reporting through PC or network interface.

**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.

**TruWatt®** Output power capability of the power supply remains constant regardless of the output voltage setting. For example, a FlexPower 250 watt supply will provide 10 amps at 24VDC and 20 amps at 12VDC, allowing the same number of locking devices to be used at either the 12 or 24V setting.

**PwrHealth™** Intelligent battery charging and battery state monitoring improve battery performance. Install hours are tracked and reported for optimum service life.

**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.

**DataLink®** Key power functions are monitored and reported through PC or browser interface with the PowerCom management software.

## LifeSafetyPower.com

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Specifications subject to change without notice.

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## FAULT DETECTION AND REPORTING

The comprehensive fault detection and reporting mechanism of the FPO series provides for both local and remote fault reporting.

On-board visual indicators are provided to give immediate installer feedback. Independent form C relay contacts are provided to report AC and system fault conditions to remote or auxiliary equipment.

### Detected Fault Conditions:

- ◆ AC Power
  - AC loss, AC low
- ◆ DC Power and System
  - Abnormal or loss of power supply operation
  - Over current, over temperature condition
  - DC output high, low
  - Battery Presence, Earth Ground (user optional)
  - Reversed battery condition, blown fuse or loss of output voltage on selected accessory boards (detected on the power supply)

## FIRE ALARM INTERFACE (FAI)

### Activation Methods

- ◆ DC voltage: 9 to 33VDC, 3 to 15mA
- ◆ Dry contact NO/NC

### Latch Enable

- ◆ NC contact set or switch (typically for Canadian use)

## POWER SUPPLY PERFORMANCE GRAPHS

