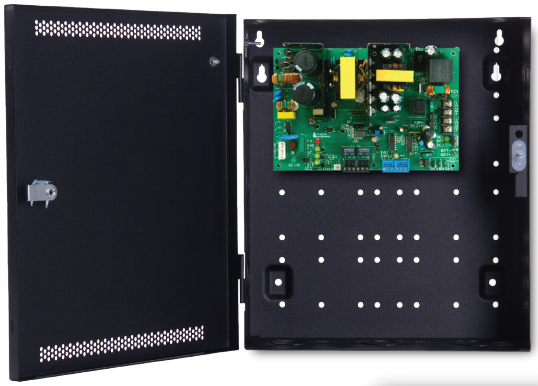
LifeSafety Power

FLEXPOWER FPO250-E1

250W, 20A/12V or 10A/24V
Power Management System
E1 locking enclosure 14" x 12" 4.5"



DESCRIPTION

The FLEXPOWER FPO250-E1 is an offline switchmode power supply-battery charger specifically designed for the lifesafety industry. Capable of providing two power outputs, user selectable for 12 or 24 VDC, the unit is configured in a painted, steel, locking enclosure with tamper switch and integral battery space.

One output provides continuous output power for system use, the second is programmable for either fail-safe or fail-secure operation, activated when the fire alarm disconnect is initiated.

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.

BENEFITS

- Agency Listed for Access Control, Fire, Security, CCTV, and Mass Notification
- ***FlexPower®*** Feature Set
  - ***SureCharge*** Microprocessor controlled battery charging
  - ***PowerCom*** Power supply programming / monitoring software
  - ***VSelect*** Installer selectable output voltage
  - ***TruWatt*** Delivers twice the current at 12V than at 24V
  - ***PwrHealth*** Intelligent battery charging and battery state monitoring
  - ***FlexConnect*** Dual voltage bus / pre-wired accesory board interconnects
  - ***Reliability+*** Full fault protection / high efficiency / fiberglass pcb
  - ***GreenSmart*** RoHS compliant, lead free, energy efficient design
  - ***DataLink*** Network communication interface option
- ***System Features***
  - Fully modular power management system
  - Multiple outputs for system power, direct lock control and accessory power distribution modules
  - Fire alarm interface for egress lock control (FAI)
  - Configurable fail-safe / fail-secure modes of operation
  - Comprehensive fault detection and reporting including optional earth ground and battery presence
  - AC and System fault output relays can be delayed via PowerCom
  - Microprocessor dual rate charging restores battery sets from 4 to 80 amphours
- ***Power Management & Reporting*** *(U.S. Patent 8,566,651)*
  - PowerCom® s/w monitors, programs, and reports on power supply core functions through a computer USB or network connection
  - Service personnel can perform onsite power supply programming and system diagnostics using the DL1 USB cable and a computer laptop
  - NetLink module option connects power system to a LAN/WAN network for remote programming and live diagnostics. NetLink monitors and reports power status, tests battery state and alerts via email/SNMP on system faults, AC loss, low battery or pre-scheduled service due
- ***Lifetime Warranty***

ELECTRICAL RATINGS

Parameter	FPO250	Unit
Input Voltage	120 / 230	VAC
Input Power (max)	282	Watts
Output Voltage	12 or 24	VDC
Output Current	20 or 10	Amps
Battery Charge Capacity	80	Ah
Efficiency	88	%
Output Ripple	120	mVp-p
Line Regulation	0.1	±%
Load Regulation	2	±%
BTU Rating	109	BTU/Hr
Continuous Power Outputs	1	
Switched Power Outputs	1	
Fire Alarm Interface	Yes	

AGENCY LISTINGS

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® STANDARD FEATURES

SureCharge The microprocessor controlled charging process used by the FlexPower power supply guarantees both proper charging current for the battery and fastest charge time. The constant current charger provides a linear, predictable charge time for any lead acid, gel battery set from 4 to 80 amphours (based on charger rating) without stress or damage to the battery.

PowerCom/PowerCom-USB LifeSafety Power's proprietary software interface for communication with FlexPower equipment through a DATALINK or USB connection. PowerCom is used for power supply monitoring, programming, and reporting.

The NL1 DATALINK network module enhances PowerCom's capability with remote diagnostics, battery management, trouble / service email alerts via LAN/WAN, and remote on/off reset control.

The DL1 USB cable and a computer laptop USB connection, enables PowerCom-USB to be used by service personnel for onsite power supply programming and system diagnostic evaluation.

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.

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 power supplies within the FlexPower system are fully fault protected and 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.

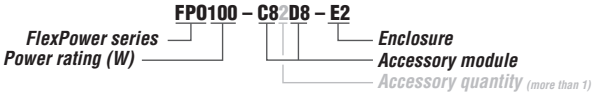
DataLink - Smart Power Management Communication Interface

Monitor, program, control, and report key power supply functions by computer or local/wide area network using a browser interface or LifeSafety Power's PowerCom® remote management software.

Power supply network connection requires the optional NL1 network module. Power supply computer connection requires the optional DL1 USB cable.

Model No.	Mechanical Info
FPO250-E1 *Power Supply / E1 Cabinet*	Size: 14" x 12" x 4.5" Weight: 10.5 lb.

FlexPower Numbering System



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.

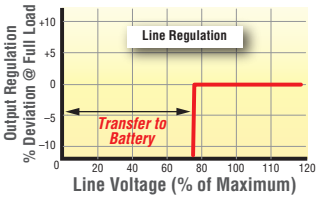
Detected Fault Conditions:

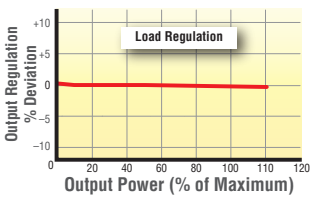
- *AC Power*
  - AC loss, AC low
- *DC Power and System*
  - Abnormal or loss of power supply operation
  - Over current, over temperature condition
  - DC output high, low
  - Battery Presence, Earth Ground (user optional)
  - Reversed battery condition, blown fuse or loss of output voltage on selected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

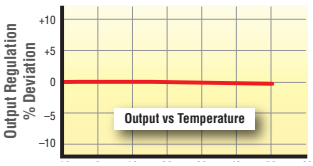
FIRE ALARM INTERFACE (FAI)

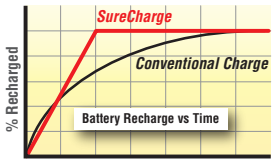
- *Activation Methods*
  - DC voltage: 9 to 33VDC, 3 to 15mA
  - Dry contact NO/NC
- *Latch Enable: NC contact set or switch (typically for Canadian use)*

FPO PERFORMANCE GRAPHS









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