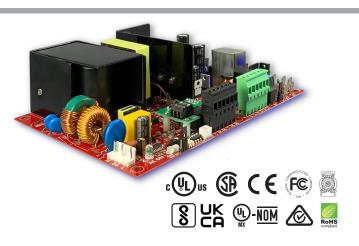


# **FPO** series

Smart DC Power Supply/Charger 75W | 150W | 250W | 120/230VAC Input Fire Alarm Interface | Network Ready | RS485 Listings: UL CUL | CE | BIS | NOM | UKCA | RCM

# FLEXPOWER GEN2 POWER SUPPLIES



# **Electrical Specifications**

Power Supply Model No*	FPO75	FPO150	FPO250
Input Voltage	120VAC, 208VAC, 230VAC 50/60Hz		
Input Current (max)	1.6A	2.5.A	3.2A
12 VDC Output Current	6 Amp	12 Amp	20 Amp
24 VDC Output Current	3 Amp	6 Amp	10 Amp
Maximum Charge Current	1 Amp	2 Amps	
Maximum Battery Size	40Ah	80Ah	
Low Battery Disconnect	at 70% of battery voltage		
System BTU/Hr	33	66	109
Full Load Efficiency	83%	87%	88%
Operating Temperature	-4 to +122F (-20 to +50C)		
Board Size (inches)	4 x 6 x 2.5	5.5 x 8.25 x 2.5	
Board Weight	1 lb	2 lbs	

\*\*For dedicated 230VAC input see FPO/E series datasheet

# **GEN2 ADVANCED FEATURES**

LockSafe™ - optimized system and battery charge voltages		
OutSmart™ - visual voltage verification technology		
Dual mode charger - supports SLA or Lithium Iron Phosphate batteries		
Built in low battery cutoff - prevents deep discharge		
Built-in battery current sensor - for enhanced battery monitoring		
Built-in output current sensor - monitors total power supply output		
Network Management		
RS485 - communication option for expanded network monitoring		
DPM™ Distributed Power Monitoring - lower managed cost per output		
AC line monitoring - remotely monitors AC line voltage		
Primary output reset - cycles main output power remotely		



# Overview

FlexPower smart power supplies offer unique performance value with these standard features:

- 120 or 230VAC user selectable ac input
- TruWatt™ same power output at 12 or 24V DC
- FAI Fire alarm disconnect on a per output basis
- Locksafe<sup>™</sup> voltage optimization for longterm lock protection
- SureCharge™ smart battery charger for SLA or LFP
- Outsmart<sup>™</sup> bicolor output LED (12V/Green, 24V/Blue)
- NetLink<sup>™</sup> built in network interface
- DPM<sup>™</sup> RS485 interace for distributed power monitoring

# Family Specifications

#### Input:

- FP075, FP0150, FP0250 : 110VAC ±10%, 50/60Hz

# **Outputs:**

- DC1 output continuous
- DC2 output switched on FAI Input
- Overload & short circuit protection with auto-restart

# Battery Backup:

- Built-in microprocessor controlled smart charger
- Charges Sealed Lead Acid (SLA) or Lithium Iron Phospate
- Auto switchover to battery with zero transfer time
- Integrated low battery cutoff

# Supervision:

- AC fail, Battery fail, System fault (form "C")
- Low power shutdown when battery voltage too low

#### Fire Alarm Disconnect Activation:

- DC voltage: 9 to 33VDC, 3 to 15mA
- Dry contact NO/NC
- Optional Fire Alarm latching

#### LED visual indicators:

- AC input, DC output, system faults, fire alarm activation

# Agency Approvals:

- UL294, UL1076 | ULC S319
- CSA C22.2 #107.1
- FCC Part 15 Subpart B
- IEC 62368-1:2014, EN55032:2015, EN61000-3-2:2014
- EN61000-3-3:2013, EN55024:2010 +A1:2015
- CE | UKCA | BIS IS13252(Part1):2010 | NOM 001:2018 | RCM, SAA
- CSFM approved | ROHS 3 Leadfree

# FLEXPOWER STANDARD FEATURES

**VSelect**<sup>®</sup> 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 Flex-Power 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

SureCharge® The microprocessor controlled constant current charging process used by the FPO power supply guarantees proper charging current for the battery and the fastest charge time without stress or damage to the battery.

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.

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

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

## NEW GEN2 FEATURES

LockSafe™ Voltage Optimization Independent battery charging circuit provides the proper charging voltage without overheating locks due to excessive output voltage

OutSmart<sup>™</sup> Visual Voltage Indication Dual color output LEDs indicate the output voltage setting: Green/12V or Blue/24V.

Smart Dual Mode Charger jumper selection for either Lithium Iron Phosphate or Sealed Lead Acid (SLA) batteries.

**DPM™ Distributed Power Monitoring** RS485 daughter board option allows up to 24 LSP devices to be monitored across a campus from a single network drop.

Remote Main Output Reset Allows remote shutdown of the main output voltage through NetLink to perform a full system reset.

Remote AC Line Monitoring Watches and reports AC line voltage connected to the FPO through NetLink. Programmable window limits allow customizable AC power alerts.

**On-Board Low Battery Disconnect** Automatically disconnects discharged battery sets to prevent deep discharge and protects sentitive electronics.

**On-Board Battery Current Sensor** Eliminates the need for an external battery sensor when used with NetLink, simplifying wiring and freeing up NetLink current sensors for other uses.

**On-Board Output Current Sensor** Reports the total output current being delivered by the FPO power supply through NetLink.

#### **Product Ordering**

To contact a local representative and place an order visit: www.lifesafetypower.com/about-us/where-to-buy or contact LSP to place an order:

#### LifeSafety Power LLC 10027 S. 51st Street, Suite 102 Phoenix, AZ 85044 USA

www.lifesafetypower.com Phone (888) 577-2898 info1@lifesafetypower.com

#### IMPORTANT

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PN: RSMOD

#### Output Regulation Deviation @ Full Load Regulation Deviation Output ~ Batterv 20 40 60 80 100 110 Line Voltage (% of Maximum) Output Power (% of Maximum) SureCharge Output Regulation % Deviation Recharged **Conventional Charge** Battery Recharge vs Time **Output vs Temperature Charging Hours** Temperature (°C)

FLEX**POWER** PERFORMANCE GRAPHS

Load Regulation

# FLEXPOWER BOARDS

Line Regulation



