LifeSafety Power FPO75

75W Power Supply/Charger, 6A/12V or 3A/24V

LifeSafety Power FPO75 is a patented power management system for security and life safety applications.

The FPO75 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 onboard 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/Standards

USA: UL 294, UL 603, UL 864, UL 1076, UL 1481, UL 2044 UL 2572, FCC PART 15, Subpart B Canada: ULC S318, ULC S319, ULC S527, CSA C22.2#107.1, CSA 22.2 #60950 CSFM Approved / CE / ROHS Leadfree

Electrical Ratings

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Input Voltage</td>
<td>120 or 230VAC</td>
</tr>
<tr>
<td>Input Power</td>
<td>83 Watts</td>
</tr>
<tr>
<td>Output Power</td>
<td>75 Watts</td>
</tr>
<tr>
<td>Efficiency</td>
<td>85%</td>
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</table>

Features

12 or 24VDC user selectable
1. 6A continuous or switched at 12VDC
2. 3A continuous or switched at 24VDC

Fire Alarm Interface (FAI)
1. User programmable fail-safe or fail-secure

Programmable 1A battery charging
1. Independent charging circuit meets stricter UL output tolerance requests
2. Microprocessor dual rate charging restores battery sets from 4 to 40 Ah
3. Automatic switch over to battery when AC fails

Protection

https://knowledge.blub0x.com/Datasheets/LSP/Power_Supplies/FPO75_Datasheet
Updated: Tue, 24 Aug 2021 20:41:50 GMT
Powered by
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature Range</td>
<td>0 - 49°C (32 - 120°F)</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>12 VDC</td>
</tr>
<tr>
<td>Output Current</td>
<td>6 Amps</td>
</tr>
<tr>
<td>Battery Charge Capacity</td>
<td>40 Amp Hours</td>
</tr>
<tr>
<td>Default Charge Current</td>
<td>1 Amp</td>
</tr>
<tr>
<td>Programmable Charge Current</td>
<td>1A</td>
</tr>
<tr>
<td>Output Ripple</td>
<td>120 mVp-p</td>
</tr>
<tr>
<td>Load Regulation</td>
<td>± 2.5%</td>
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<tr>
<td>BTU Rating</td>
<td>33 BTU/Hr</td>
</tr>
<tr>
<td>Continuous Power Outputs</td>
<td>1</td>
</tr>
<tr>
<td>Switched Power Outputs</td>
<td>1</td>
</tr>
<tr>
<td>Fire Alarm Interface (FAI)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1. Over load protection / short circuit protection
2. Over temperature protection
3. AC line transient voltage protection

**Supervision**

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

**Visual Indicators**

1. AC input
2. DC1, DC2 output
3. Fire alarm activation
4. AC fault
5. System fault
6. Short to earth ground
7. Reverse battery polarity

**Reporting and Monitoring**

1. Programmable AC and System fault delays
2. Fire alarm interface for egress lock control
3. Cumulative AC and System fault counters
4. Total battery service hours
5. Total power supply run-time hours
6. Network or PC reporting of all system conditions
7. Requires DL1 USB cable for PC interface
8. Requires NetLink module for WAN/LAN

**Standard Features**

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 40 amphours without stress or damage to the battery.
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.

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.

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

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.

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.

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

Key power functions can be monitored and reported through any device, anywhere at any time with BluSKY™ Power Management.

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**

1. **AC Power**
   1. AC loss, AC low
2. **DC Power and System**
   1. Abnormal or loss of power supply operation
   2. Over current, over temperature condition
   3. DC output high, low
   4. Battery Presence, Earth Ground (user optional)
   5. 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**

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

**Latch Enable**

1. NC contact set or switch (typically for Canadian use)

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**Power Supply Performance Graphs**

![Graphs showing power supply performance](image)

**Ordering Information:**

[https://knowledge.blub0x.com/Datasheets/LSP/Power_Supplies/FPO75_Datasheet](https://knowledge.blub0x.com/Datasheets/LSP/Power_Supplies/FPO75_Datasheet)
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<tr>
<th>MFG Part #</th>
<th>BluBØX Order #</th>
<th>Description</th>
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<tr>
<td>FPO75</td>
<td>670-1610</td>
<td>LSP Power Supply FPO75 6A/12V or 3A/24V 75W 40Ah</td>
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<tr>
<td>Mechanical Information</td>
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<td>Size: 4.0” x 6.0” x 2.5” Weight: 1 lb</td>
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- Provided with cables and mounting hardware

### Additional Resources

- Ae Spec(Available Soon)
  - FPOInstallManual.pdf
  - FPO75 Datasheet.pdf