Overview

MCLASS™ Unified Power Systems combine FlexPower® power modules alongside Mercury Security™ access hardware in one compact and secure UL Listed solution. This unit is a 12V and 24V DC dual voltage access power system.

Three C8 lock control modules provide twenty four access control inputs capable of voltage or dry contact activation, and twenty four outputs programmable for failsafe / failsecure operation at either 12 or 24 VDC and controlled by the integrated fire alarm interface circuit on the FPO. Three D8 modules provide twenty four auxiliary class II outputs and each output is configurable for 12 or 24VDC operation.

MCLASS enclosures are painted steel with removable backplate and include lock, two (2) keys and tamper switch.

System Features
- **FPO offline power supply**
  - 120 or 230 VAC input
  - 12 and 24 VDC outputs
  - On board Fire Alarm interface
  - Continuous and resettable DC
- **Distributed outputs**
  - 24 auxiliary, power limited at 2.5A each
  - 24 controlled, fused at 3A each
- **Expansion options**
  - Increased power, multiple voltages
  - Additional distribution outputs
- **Lifetime warranty**

Enclosure Features
- **Labor saving design**
  - Pre-wired power section
  - Pre-punched knockouts
  - Removable backplate simplifies installs
  - Pre-defined hole pattern for power section
  - Access panels mount on threaded studs - no drilling required
- **Additional benefits**
  - Wire management room
  - Double doors with three point lock
  - 8" enclosure depth fits battery set
  - Tamper switch, dual key set standard
  - Mounting hardware for access boards included

Specifications

**Input Power**
- Input 120/230 VAC 50/60 Hz | 600 Watts
- Overload and short circuit protection
- Over temperature protection
- Polarized AC power supply disconnect

**Output Power**
- FPO250 X 2 : 12V/20A or 24V/10A | 250 Watts Each
  - Outputs: Continuous (DC1) Resettable (DC2)
  - 24 control outputs, fused at 3A each
  - 24 auxiliary outputs, class 2 power limited at 2.5A each
  - 120 mV output voltage ripple
  - System Efficiency: 87% | System BTU Rating: 218 BTU/Hr

**Battery Charging**
- Independent built-in 2A charger for sealed lead acid or gel type batteries
- Microprocessor dual rate charging of 12 or 24 V battery sets
- Charges up to 80Ah battery sets within UL limit
- Automatic switchover to standby battery when AC fails
- Zero voltage drop when switched over to battery backup

**Supervision**
- AC Fail (form "C" contacts)
- System Fault (form "C" contacts) may be triggered by low/no battery, short to earth ground, power supply failure or blown fuse

**Visual Indicators**
- AC input, DC1 and DC2 output
- System fault / AC fault | Short to earth ground | Reverse battery polarity
- Fire Alarm Input activated
- C8: DC outputs and fault status
- D8P: DC outputs

**Regulatory Compliance**
- UL294, UL603, UL1076, ULC S318, ULC S319
- CSA C22.2 #107.1, CSA 22.2 #60950
- FCC Part 15, Subpart B
- CE

**Mercury/LSH Joint Listing**

**Enclosure Dimensions**
- Size: 48.00H x 36.00W x 8.00D in. (122.00 x 91.00 x 20.30 cm) | Weight: 120 lbs.

**Access Panel Mounting**
- LP1502, LP4502, LP2500, MR50, MR52, MR16, LNL-500, 1100, 1200, 1320, 2000, 2220, 3300

Ordering

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>FPO250/250-3C83D8PE12M</td>
<td>500W (12V &amp; 24V) 24 lock/24 ptc aux outputs</td>
</tr>
<tr>
<td>FPO250/250-3C8P3D8PE12M</td>
<td>500W (12V &amp; 24V) 24 ptc lck/24 ptc aux outputs</td>
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<tr>
<td>FPO250/250-3C83D8E12M</td>
<td>500W (12V &amp; 24V) 24 lock/24 aux outputs</td>
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For models preset to 230VIN, add "/E" to the end of the model number.

Ex: FPO250/250-3C83D8PE12M/E
E12M Mercury Mounting Guide

<table>
<thead>
<tr>
<th>Mercury</th>
<th>Slots</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td>MR52 / LPxx</td>
<td>12</td>
<td>6 x 8</td>
</tr>
<tr>
<td>MR16in / MR16out</td>
<td>12</td>
<td>6 x 8</td>
</tr>
<tr>
<td>EP2500 / MUX8</td>
<td>13</td>
<td>6 x 5</td>
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Enclosure Features

- Custom Backplate
  - Light weight aluminum with AC and battery slots to protect cables
  - LSP pre-wired power modules reduce installation time
  - Vertical Mercury pattern for maximum design flexibility
  - Wide wire management channels for panduit or tie wrap

- E12 Enclosure
  - Protected AC cover with on/off circuit breaker for maintenance safety and AC outlet for service equipment or lighting
  - Pre-drilled mounting holes for field upgrades
  - 8" cabinet depth accommodates large battery sets
  - Removable double doors with "fast disconnect" ground straps and three point locking mechanism
  - Multiple knockouts all four sides
E12 Enclosure Dimensions (H x W x D)
48.00” x 36.00” x 8.00” (122 x 91 x 20.3 cm)