

## UNIFIED POWER SOLUTIONS® MERCURY

Integrated Power Systems

Wall Mount | Standard/Managed | Single or Dual Voltage | LP and MP Series Compatible

### **Overview**

Unified Power Solutions for Mercury integrate system power, lock power and Mercury controllers into one LifeSafety Power wall mount enclosure. LP or MP Series controllers and multiple LifeSafety Power FlexPower® devices can be mounted in these access control power systems, which are capable of controlling up to 24 doors.

Available options include single (12 or 24V DC) or dual voltage operation (12 and 24V DC), power distribution and control, individual output protection by either fuses or class 2 power limited, buffered lock control, and remote reporting and test. Each LSP output is protected against electrical surges caused by lightning or transients on the external wiring (SurgeShield) and each LSP control output is individually selectable for available DC voltages, either failsafe or failsecure operation with fire alarm interface.

Optional network reporting capabilities include operational fault status, power supply output, battery charging voltage, battery charging current, and fire alarm input status. In addition to automated and scheduled status reports, diagnostic servicing and battery load tests can be performed remotely, saving or reducing the cost of on-site servicing...

#### **Product Features**

- Labor Saving Design
  - Pre-Wired Power Section
  - Pre-punched rear Knockouts
  - Flexible backplate mounting locations with threaded studs
  - Comprehensive wire management with internal tie down points
- Integrated access system with lock and system power distribution
- 120 or 230V AC user selectable input and integrated AC main switch (E6 enclosures and up)

## **Network Monitoring**

- Monitor/alert power supply, battery operation and faults
- Remote test battery run time, low battery and time to service alert
- Monitor/power cycle individual outputs (M8/SD4/SD16 models)
- Monitor alert external rack or room temperature







## **Configuration Options**

- Single voltage or 12 and 24VDC dual voltage options cover all access functions
- Power distribution for either direct (D8) controlled (C8), or managed (SD4/SD16/M8)
- Individual output selection for failsafe, failsecure, lock voltage and fire alarm interface (FAI)
- High capacity battery charge capability
- Automotive fuses for ease of service and replaceability

#### **Fire Alarm Interface**

- Latching or Non-latching | Remote reset capability
- Normally Open, Normally Closed
- Voltage or Polarity Reversal Activation

### **Comprehensive Fault Detection and Reporting**

- May be connected into access controller or used standalone
- Form C contact transfer for AC Loss or brownout
- Form C contact transfer for abnormal system operation

## **Agency Listings**

• UL, CUL, CE\*, RoHS

## **Lifetime Warranty**





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Specifications						
Input Power	Input 120/230 VAC 50/60 Hz   170 Watts (FPO150)   250 Watts (FPO250) Thermal overload protection / Short circuit protection					
Output Power	FPO75 75 Watts: FPO150 150 Watts: FPO250 250 Watts:	6 amps at 12 VDC or 3 amps at 24VDC 12 amps at 12 VDC or 6 amps at 24 VDC 20 amps at 12 VDC or 10 amps at 24 VDC				
Internal Power Distribution	D8/D8P eight auxiliary outputs:  C8/C8P four control outputs:  M8/M8P eight managed lock outputs:  SD4/SD4P four managed auxiliary outputs:  SD16 sixteen managed auxiliary outputs:  Individually selectable outputs on dual voltage systems  D8 fused at 3A/ea, D8P Class 2 Power limit  C8 fused at 3A/ea, M8P Class 2 Power limit  M8 fused at 3A/ea, M8P Class 2 Power limit  SD4/SD4P four managed auxiliary outputs:  SD16 Class 2 Power limited at 1A/ea					
Network Connectivity for Managed Power	NL4 four SPI Connections NLX eight SPI Connections; 16 RS485 Connections					
Supervision	AC input, DC1, and DC2 output Low battery and battery presence supervision (form C contacts) AC fail supervision (form C contacts) System Fault, AC Fault, Ground Fault, Reverse Battery					
External Indicators	AC on	·				
Battery Charging	Independent built-in charger for sealed lead acid or gel type batteries Microprocessor charging of 12 or 24 V battery sets Automatic switchover to standby battery when AC fails Zero voltage drop when switched over to battery backup					
Regulatory Compliance	CE*, UL294 6th Edition, UL603, UL1076, ULC S318, ULC S319 /E Models are CE Compliant					
Access Panel Mounting	Accomodates one to twelve LP or MP series boards, depending on configuration					
BTU Rating	FPO75: 33BTU/hr, FPO150: 66BTU/Hr, FPO250: 175BTU/Hr					
Operating Temperature	ALL MODELS Ambient Temperature Ambient Humidity Storage Temperature	0°C to 49°C (32°F to 120°F) 93% at 32°C (90°F) maximum -30°C to 70°C (-22°F to 158°F)				
Physical Dimensions	cm)   Weight 9 lbs. cm)   Weight 14 lbs. cm)   Weight 26 lbs. cm)   Weight 38 lbs. cm)   Weight 53 lbs. cm)   Weight 100 lbs.					

# Ordering

					Internal Distribution			
Doors	*Model No.	Network	Voltage (VDC)	Current	Bulk	Auxiliary	Lock	Dimensions
1-2	FPO75-B100C4PE1M	No	12 <b>and</b> 24V	2A/12V <b>and</b> 2A/24V	3	0	4	14" x 12" x 4.5"
4	FPO75-B100C4D8PE2M	No			3	8	4	20" x 16" x 4.5"
	FPO75-B100M8PNL4E2M	Yes			3	0	8 MGD	
8	FPO150-B100C8D8PE4M	No	12 and 24V	4A/12V <b>and</b> 4A/24V	3	0	8	24" x 20" x 6.5"
	FPO150-B100D8PM8NL4E4M	Yes			3	8	8 MGD	
	FPO150-B100M8NL42SD4PE4M	Yes			3	8	8 MGD	
	FPO150-B100C8D8PE6M	No			3	8	8 MGD	30" x 23" x 4.5"
	FPO150-B100D8PM8NL4E6M	Yes			3	8	8	
	FPO150-B100M8NL42SD4PE6M	Yes			3	8 MGD	8 MGD	
16	FPO150/250-2C82D8PE4M1	No	12 and 24V	12A/12V <b>and</b> 10A/24V	4	16	16	24" x 20" x 6.5"
	FPO150/250-2D8P2M8NL4E4M1	Yes			4	16	16 MGD	
	FPO150/250-2M8NLXSD16E4M1	Yes			4	16 MGD	16 MGD	
	FPO150/250-2C82D8PE6M1	No			4	16	16	30" x 23" x 6.5"
	FPO150/250-2D8P2M8NL4E6M1	Yes			4	16	16 MGD	
	FPO150/250-2M8NLXSD16E6M1	Yes			4	16 MGD	16 MGD	
	FPO150/250-2C82D8PE8M2	No			4	16	16	36" x 30" x 6.5"
	FPO150/250-2D8P2M8NL4E8M2	Yes			4	16	16 MGD	
	FPO150/250-2M8NLXSD16E8M2	Yes			4	16 MGD	16 MGD	
24	FPO250/250-3C83D8PE12M	No		20A/12V and 10A/24V	4	24	24	48" x 36 x 8"
	FPO250/250-3D8P3M8NLXE12M	Yes	12 and 24V		4	24	24 MGD	
	FPO250/250-3M8NLX2SD16E12M	Yes			4	24 MGD	24 MGD	

MGD—Managed Outputs Single voltage—factory set to 12VDC Dual voltage—outputs can be individually set for 12V or 24VDC

Networking—monitors power supply, battery set and relay control outputs \*For CE 230VAC option, add "/E" suffix to model number, i.e FPO75-B100C4PE1M



## FlexPower and Mercury Configurable Footprint

Unified Power Systems allow for multiple configurations of FlexPower modules and Mercury modules. These diagrams represent the maximum capacity of the system footprint.

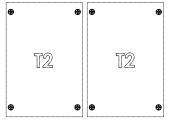
## FlexPower Key

LifeSafety Power FlexPower modules come in three sizes: T1, T2, T3. The footprint for the largest module (T1) could alternatively accommodate two medium modules (T2) or four small modules (T3).

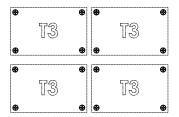
The medium size footprint (T2) could alternatively accommodate two small modules (T3).



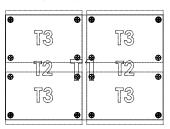
8.25" x 5.5" x 2.5"

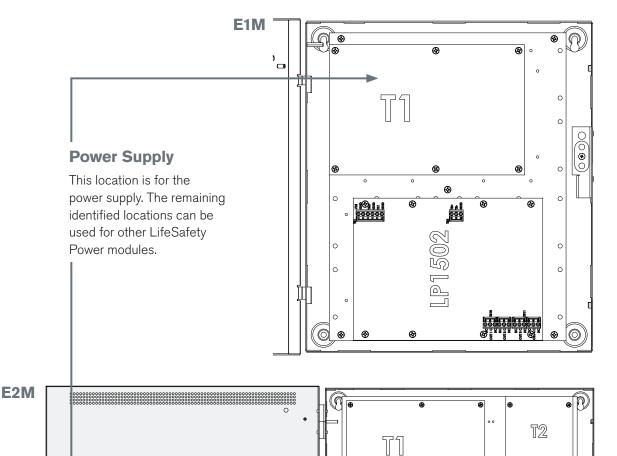


4" x 6" x 2.5"



4" x 2.5" x 1.5"





# ○ **E2M1**

Optional Backplate Expansion



To view customization options of the full system, check out our online Product Configurator.

T3

LP1502

(C) (S)

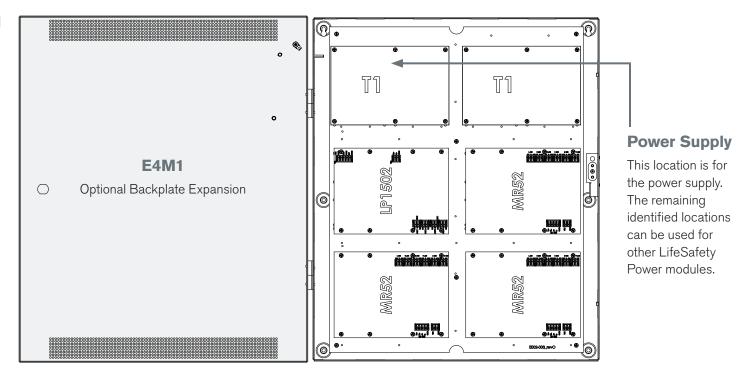


MR52

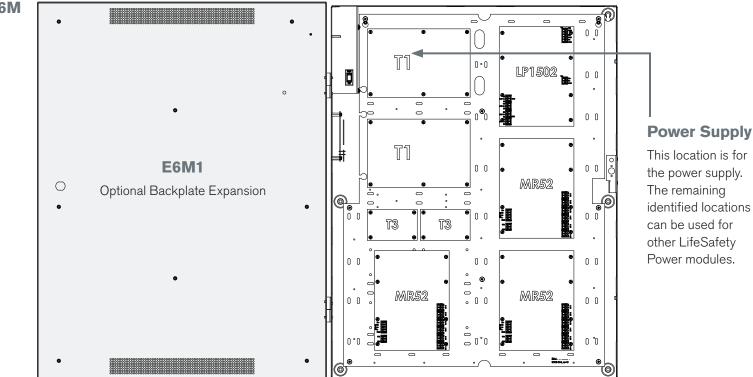


# FlexPower and Mercury Configurable Footprint (CONTINUED)

### E4M



### E<sub>6</sub>M



# **Flexible Configuration Options**

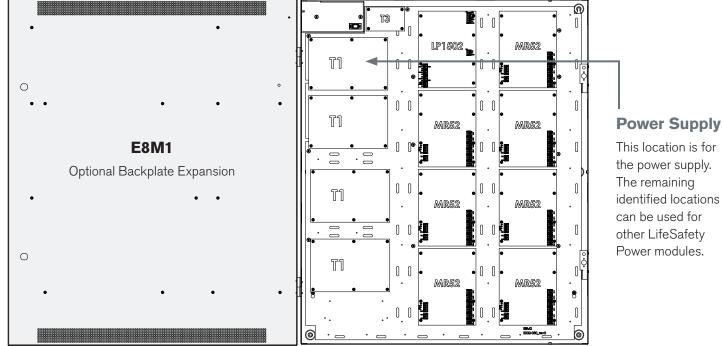
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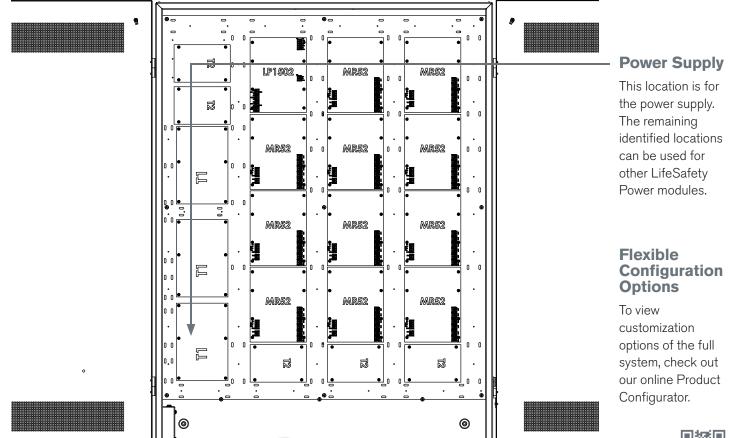


# FlexPower and Mercury Configurable Footprint (CONTINUED)

### **E8M2**

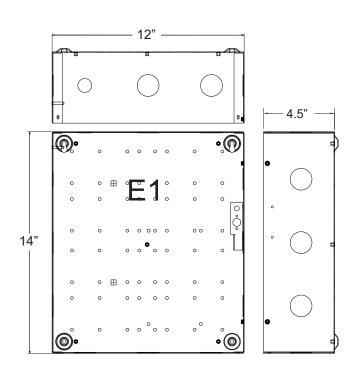


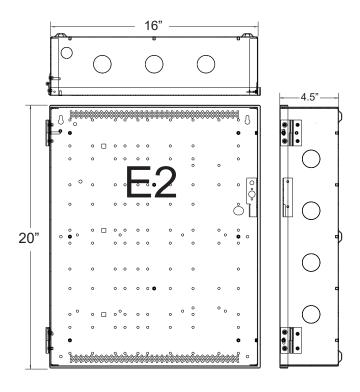
## **E12M**

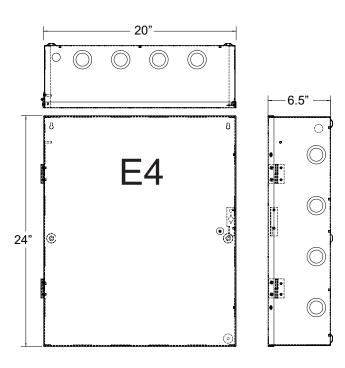


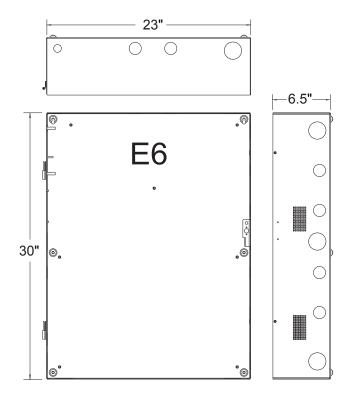


# Dimensions

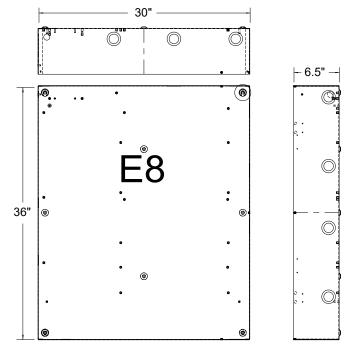


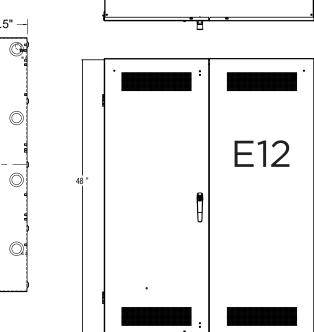






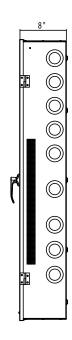
# **Dimensions** (CONTINUED)





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(888) 577-2898 | techsupport@LifeSafetyPower.com