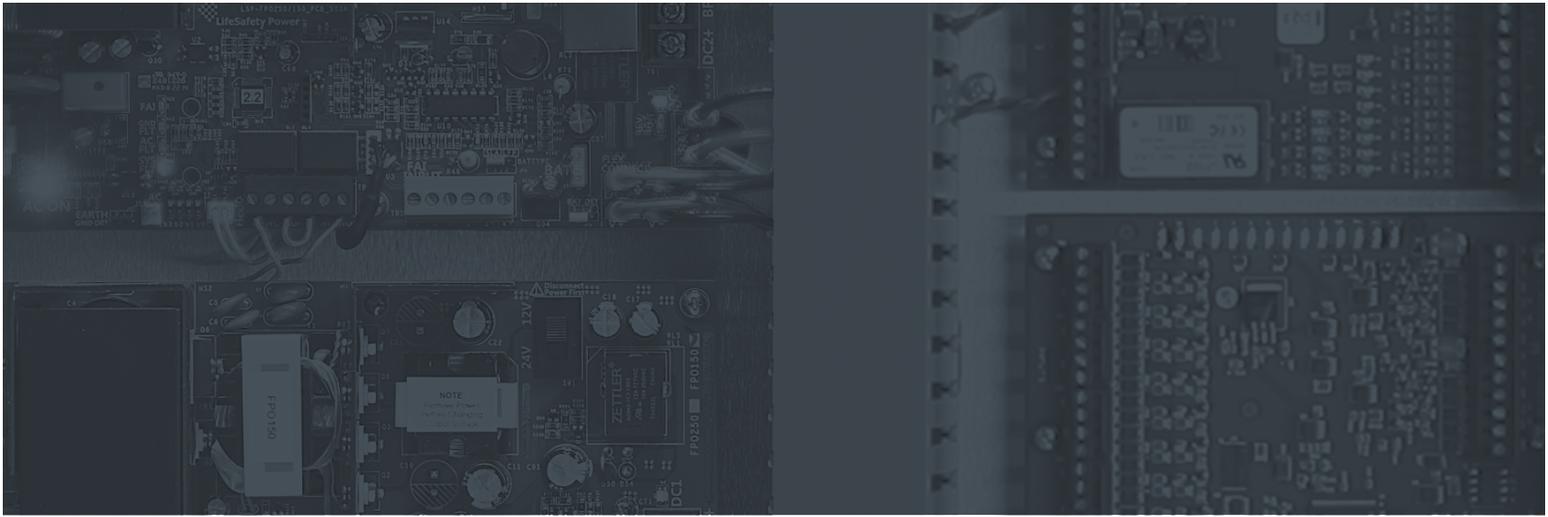# Power Selector Guide
For Access Control

*What power solution
does your Access Control
project need?*

LifeSafety Power®

Power Supplies can be installed in a wide variety of access control scenarios.

Consider these factors to help determine the right power supply for your project.

> TIP: As you make selections, the text in parentheses guides you to the selections in the table and the characters in your final SKU.

1. How many doors do you need to support?
- Up to 2 doors
- Up to 4 doors
- Up to 8 doors
- Up to 16 doors

2. What access control will you integrate inside the power enclosure?
- None *(Traditional)*
- Mercury *(Unified, M)*
- AMAG *(Unified, A)*
- Brivo *(Unified, B)*
- Honeywell *(Unified, H)*
- Paxton *(Unified, P)*
- Software House *(Unified, S)*
- HID Aero *(Unified, V)*
- Axis *(Unified, X)*
- ZKTeko *(Unified, ZK)*

3. Do you need single or dual voltage?
- Single voltage — 1 power supply
- Dual voltage — 2 power supplies *(FPO150/250)*, or 1 power supply *(FPO75, FPO150, or FPO250)* and 1 power conversion module *(B100)*

4. Which do you prefer for your power distribution?
- ATM fused
- Class 2 power limited *(P version)*

5. What do you want to manage in and around the power supply?
- No management
- Power supply and batteries *(NL4)*
- Power supply, batteries, and locks *(NL4 and M8)*
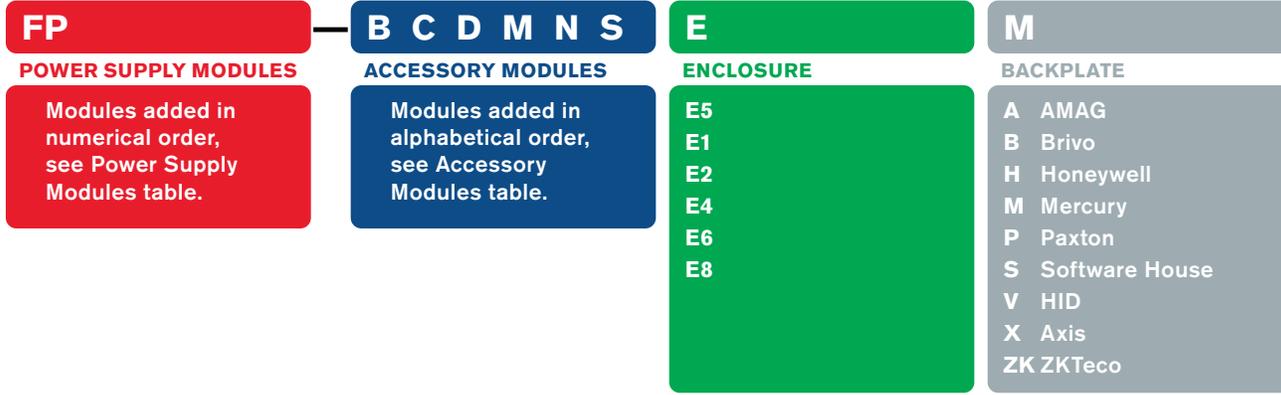
What is Managed Power?

Monitor, control, and manage power systems across multiple locations, all in a single interface. Managed power brings visibility into the health metrics of a power system and enables control over the system and its connected devices without having to physically access the system.

NOTE: A NetLink module or products with integrated NetLink technology must be used for a managed power system. See the Network Connectivity section for module details.

Power Cycle Devices | Predictive Lock Failure with Alerts | Lock Cycle Count for Proactive Replacement | Battery Load Test

How to Order

LifeSafety Power SKUs can look intimidating, but when you break down the components, they give clarity to what is in the system. To create your part, work from left to right, picking the components for your system.

FP	B C D M N S	E	M
POWER SUPPLY MODULES	**ACCESSORY MODULES**	**ENCLOSURE**	**BACKPLATE**
Modules added in numerical order, see Power Supply Modules table.	Modules added in alphabetical order, see Accessory Modules table.	E5 E1 E2 E4 E6 E8	A AMAG B Brivo H Honeywell M Mercury P Paxton S Software House V HID X Axis ZK ZKTeco

TIP: For enhanced guidance and best products for your application, scan QR code to visit our Product Wizard.

Products

Based on your selections above, the chart below offers a few configurations that likely will fit your project's needs. Find additional detailed information about each colored component in the Modules, Enclosures, and Backplates sections.

FP	B C D M N S	E	M
POWER SUPPLY MODULES	**ACCESSORY MODULES**	**ENCLOSURE**	**BACKPLATE**

UP TO 2 DOORS			
TRADITIONAL	TRADITIONAL, MANAGED	UNIFIED	UNIFIED, MANAGED
FPO75-E1	FPO75-NL4E1	FPO75-D8PE1M	FPO75-D8PNL4E1M
FPO75-D8PE1	FPO75-D8PNL4E1	FPO75-B100D8PE1M	FPO75-B100D8PNL4E1M
FPO75-B100C4PE1	FPO75-M8PNL4E1	FPO75-B100C4PE1M	FPO75-B100M8PNL4E2M
UP TO 4 DOORS			
TRADITIONAL	TRADITIONAL, MANAGED	UNIFIED	UNIFIED, MANAGED
FPO75-E1	FPO75-NL4E1	FPO75-D8PE2M	FPO75-D8PNL4E2M
FPO75-D8PE1	FPO75-D8PNL4E1	FPO75-B100D8PE2M	FPO75-B100D8PNL4E2M
FPO75-B100C4D8PE1	FPO75-B100M8PNL4E1	FPO75-B100C4D8PE2M	FPO75-B100M8PNL4E2M
UP TO 8 DOORS			
TRADITIONAL	TRADITIONAL, MANAGED	UNIFIED	UNIFIED, MANAGED
FPO150-E1	FPO150-NL4E1	FPO150-D8PE4M	FPO150-D8PNL4E4M
FPO150-D8PE1	FPO150-D8PNL4E1	FPO150-B100C8D8PE4M	FPO150-B100D8PM8NL4E4M
FPO150-B100C8D8PE2	FPO150-B100D8PM8NL4E2	FPO150-B100C8D8PE6M	FPO150-B100D8PM8NL4E6M
UP TO 16 DOORS			
TRADITIONAL	TRADITIONAL, MANAGED	UNIFIED	UNIFIED, MANAGED
FPO250-E1	FPO250-NL4E1	FPO250-2D8PE4M1	FPO250-D8PNL4E4M1
FPO250-2D8PE1	FPO250-2D8PNL4E1	FPO150/250-2C82D8PE6M1	FPO150/250-2D8P2M8NL4E6M1
FPO150/250-2C82D8PE2	FPO150/250-2D8P2M8NL4E4	FPO150/250-2C82D8PE8M2	FPO150/250-2D8P2M8NL4E8M2

In this table, Unified options that end in "M", "M1" or "M2" indicate a Mercury backplate. "M" for Mercury backplate, "M1" for Mercury backplate plus door mount, "M2" for extended Mercury backplate.

Door Count Load Assumptions

Our door count estimates are based on the following load assumptions:

- **2 doors** = 2.3 Amps @ 12 VDC | 1.8 Amps @ 24 VDC
- **4 doors** = 4.15 Amps @ 12 VDC | 3.15 Amps @ 24 VDC
- **8 doors** = 8.3 Amps @ 12 VDC | 6.3 Amps @ 24 VDC
- **16 doors** = 16.6 Amps @ 12 VDC | 12.6 Amps @ 24 VDC

- **Access Control Panel:** 500 mA @ 12-24 VDC (±10%)
- **Card Reader:** 300 mA @ 12-24 VDC (±10%)
- **Electronic Lock:** 500 mA @ 12 VDC / 250 mA @ 24 VDC
- **Request to Exit:** 100 mA @ 12 or 24 VDC

Modules

Each power supply and accessory module has its own function, making the system easily configurable to precisely fit your project's needs and to expand the system when it's time.

POWER SUPPLY MODULES

MODULE TYPE	APPLICATION	STANDARD	MANAGED
POWER SUPPLY	Used to supply the system's power to the other modules and connected devices		**FPO75†** 75 Watts 6 Amps @ 12VDC	3 Amps @ 24VDC
			FPO150† 150 Watts 12 Amps @ 12VDC	6 Amps @ 24VDC
			FPO250† 250 Watts 20 Amps @ 12VDC	10 Amps @ 24VDC

ACCESSORY MODULES

MODULE TYPE	APPLICATION	STANDARD	MANAGED
POWER CONVERSION	Used for dual voltage in a single enclosure; it takes in one power voltage and converts it to another voltage (ex. 24VDC to 12VDC)	**B100** 4 Amps Converts to 5–18 VDC	**B150‡** 6 Amps Converts to 3–18 VDC
AUXILIARY POWER DISTRIBUTION	Ideal for distributing power to access control modules, card readers, cameras, and request to exit devices	**D8/D8P** 8 Outputs D8: Fused, Automotive style D8P: Class 2 power limited	**SD4/SD4P†** 4 Outputs SD4: Fused, Automotive style SD4P: Class 2 power limited
LOCK POWER DISTRIBUTION	Ideal for distributing power to locks, including maglocks and electric strikes	**C4/C4P** 4 Inputs	4 Outputs C4: Fused, Automotive style C4P: Class 2 power limited	**M8/M8P†** 8 Inputs	8 Outputs M8: Fused, Automotive style M8P: Class 2 power limited
		C8/C8P 8 Inputs	8 Outputs C8: Fused, Automotive style C8P: Class 2 power limited	
NETWORK CONNECTIVITY	Used to monitor, control, and manage power supply and connected devices through NetLink and MSM Enterprise		**NL4** 4 SPI Connections **NLX** 8 SPI Connections 16 RS485 Connections

†NL4 or NLX required for managed power   ‡NLX required for managed power

ENCLOSURES

LifeSafety Power Solutions are flexible and modular to meet your system's needs, whatever they are. Our systems are available in either Traditional or Unified versions.

Traditional
Enclosure, modules mount on enclosure

E4

Available in:
E5   E1   E2   E4

Unified
Enclosure and backplate, modules mount on backplate

E4x

Available in:
E5   E1   E2   E4   E6   E8

The enclosure size will be determined by the available wall space, the necessary power supplies and modules, and any required access control modules. Here are a few examples of the enclosure size required to support a Unified system, based on the access control module hardware.

DOOR COUNT ACCESS ASSUMPTIONS	2 DOOR	4 DOOR	8 DOOR	16 DOOR
Axis/Brivo/HID/ Honeywell/Mercury/Paxton	E1–E2	E2–E4	E4–E6	E4–E8
Software House	—	E2	E4	E6–E8
AMAG/ZKTeco	—	E4	E4	E8

Some exceptions apply, visit the Product Wizard to verify configurations specific to each access control provider.

No matter the size there is an enclosure to fit the application. Additonal sizes and rackmount versions are available.

E5x
8.5x11x3"
22x28x8cm

E1x
14x12x4.5"
36x31x11.5cm

E2x
20x16x4.5"
51x41x11.5cm

E4x
24x20x6.5"
61x51x16.5cm

E6x
30x23x6.5"
76x58x6.5cm

E8x
36x30x6.5"
91x76x6.5cm

BACKPLATES

In Unified systems, backplates provide the opportunity to easily mount access control modules inside the same enclosure as the power supply.

Select systems can be configured with a standard backplate and with a backplate mounted to the door.

1 for door mount (**FPO150/250**-**2C82D8P**E6**M1**),
2 for extended backplate (**FPO150/250**-**2C82D8P**E8**M2**)

NOTE: Many Unified systems can also be ordered prewired from the factory for plug-and-play access control module installation.

A	AMAG
B	Brivo
H	Honeywell
M	Mercury
P	Paxton
S	Software House
V	HID
X	Axis
ZK	ZKTeco

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