

UNIFIED POWER SOLUTIONS® PDK

Integrated Power Systems

Wall Mount | Standard/Managed | Single or Dual Voltage | Compatible with Red Series Controllers

Overview

Unified Power Solutions for ProdataKey (PDK) integrate system power, lock power and pdk controllers into one LifeSafety Power (LSP) wall mount enclosure.

Red1, Red2, Red4 and Red Aux 8 series controllers and multiple LifeSafety Power FlexPower® devices can be mounted in these access control power systems, which are capable of controlling up to 32 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 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/SD16 models)
- Monitor alert external 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 (M8/SD4/SD16)
- 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





Specifications								
Input Power	Input 120/230 VAC 50/60 Hz 170 Watts (FPO150) 250 Watts (FPO250) Thermal overload protection / Short circuit protection							
Output Power	FPO150 150 Watts: FPO250 250 Watts:	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: SD16 sixteen managed auxiliary outputs: Individually selectable outputs on dual voltage	D8 fused at 3A/ea, D8P Class 2 Power limited at 2.5A/ea C8 fused at 3A/ea, C8P Class 2 Power limited at 2.5A/ea M8 fused at 3A/ea, M8P Class 2 Power limited at 2.5A/ea SD16 Class 2 Power limited at 1A/ea e systems						
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	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 multiple Red1, Red2, Red4 and	Accomodates multiple Red1, Red2, Red4 and Red Aux 8 boards depending on configuration						
BTU Rating	FPO150: 66BTU/Hr, FPO250: 175BTU/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	E1 Size: 14"H x 12"W x 4.5"D (36 x 30 x 11 E2 Size: 20"H x 16"W x 4.5"D (51 x 41 x 11 E4 Size: 24"H x 20"W x 6.5"D (61 x 51 x 17 E6 Size: 30"H x 23"W x 6.5"D (76 x 58 x 17 E8 Size: 36"H x 30"W x 6.5"D (91 x 76 x 17	cm) Weight 14 lbs. 7 cm) Weight 26 lbs. 7 cm) Weight 38 lbs.						

Ordering

					Internal Distribution			
Doors	Model No.	Network	Voltage (VDC)	Current	Bulk	Auxiliary	Lock	Dimensions
1	FPO75-B100C4D8E1PDK	No		6A/12V or 3A/24V	3	8	4	14" x 12" x 4.5"
8	FPO150-B150M8NL4SD4E2PDK	Yes		12A/12V or 6A/24V	4	4	8	20" x 16" x 4.5"
16	FPO250-B1502M8NLXSD16E4PDK	Yes	12 and 24V	20A/12V or 10A/24V	5	16	16	24" x 20" x 6.5"
24	FPO150/250-3C82D8E6PDK	No		20A/12V or 10A/24V and 12A/12V or 6A/24V	5	16	24	30" x 23" x 6.5"
24	FPO150/250-3M8NLXSD16E6PDK	Yes		20A/12V or 10A/24V and 12A/12V or 6A/24V	5	16	24	30" x 23" x 6.5"
32	FPO250/250-4C82D8E8PDK	No	1	20A/12V and 10A/24V	4	16	32	36" x 30" x 6.5"
32	FPO250/250-4M8NLXSD16E8PDK	Yes		20A/12V and 10A/24V	6	16	32	36" x 30" x 6.5"

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-B100C4D8E1PDK/E



FlexPower and PDK Configurable Footprint

Unified Power Solutions for ProdataKey (PDK) integrate system power, lock power and PDK controllers into one LifeSafety Power wall mount enclosure.

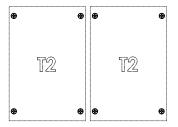
FlexPower Key

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).

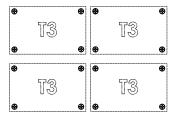
The medium size footprint (T2) could alternatively accommodate two small modules (T3).



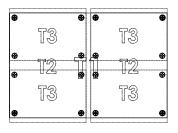
8.25" x 5.5" x 2.5"

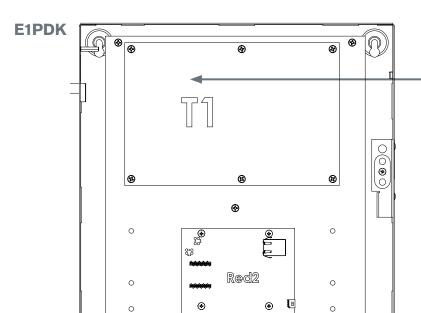


4" x 6" x 2.5"



4" x 2.5" x 1.5"

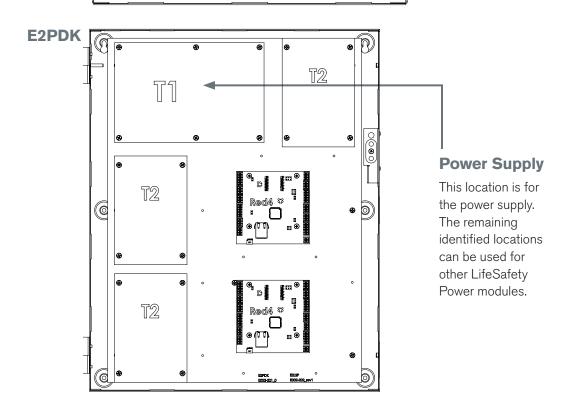




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Power Supply

This location is for the power supply. The remaining identified locations can be used for other LifeSafety Power modules.



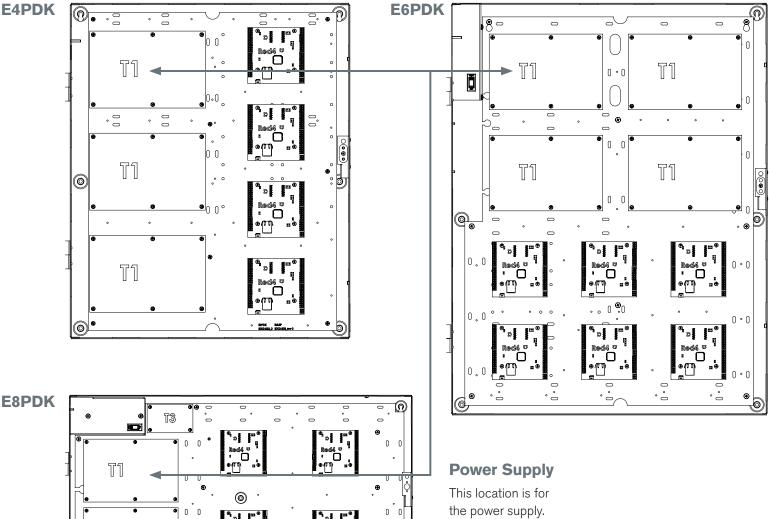
Flexible Configuration Options

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





FlexPower and PDK Configurable Footprint



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T1 0.0 0.0 0 • 6 0 Red4 5 0 0 0 TI 0 0• • () 0 0.0 T1 0 0 0 0 T3 T3 0 0 0 6

Flexible Configuration Options

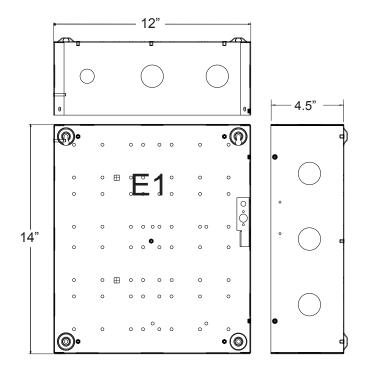
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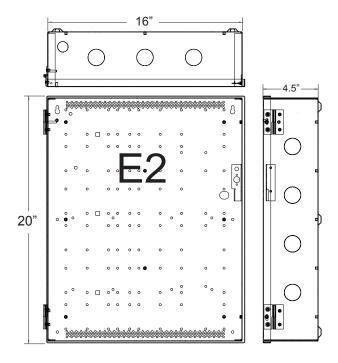


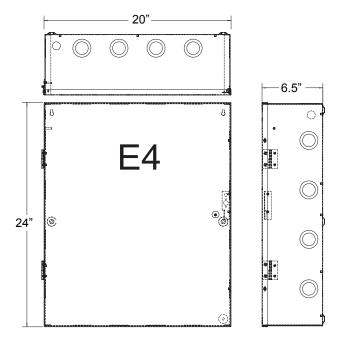


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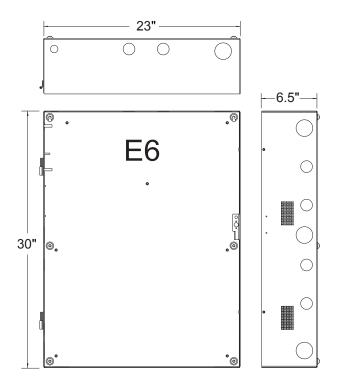
Dimensions

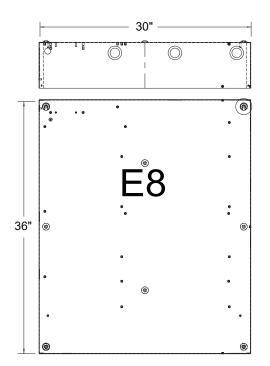


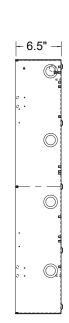




Dimensions









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