

## REMOTE POWER SUPPLY (P/N 10-2829)



### Features

- Provides reliable filtered and regulated power to be installed where needed
- Provides four outputs that can be configured for notification appliance booster, auxiliary power, or door holder operation
- Provides for System Sensor, Cooper-Wheelock or Gentex notification appliance synchronization
- Can be cascaded or controlled independently
- Field configurable using on-board dip-switches
- On-board diagnostic LEDs identify wiring or internal faults
- 35AH maximum battery charging capacity
- 100, 120 or 240 Vac power input
- Keyed, lockable steel enclosure with removable door
- The RPS enclosure has press studs for mounting up to four addressable modules below the circuit board

### Description

The RPS is a stand-alone 24 Vdc filtered, regulated, and supervised power supply capable of providing additional power and circuits for notification appliances and other 24 Vdc loads. It is listed for dry locations and can easily be installed where auxiliary power is needed. Any of the RPS's four output circuits (NAC) can easily be configured to perform the following functions:

Notification Appliance Circuit (NAC) Operation – each NAC circuit turns on based on the activation of control Input 1 or 2. Each circuit can supply a maximum of 3 amps @ 24 Vdc regulated, continuous duty power output to connected notification appliances. Each NAC circuit can be configured to operate independently upon activation of control Input 1 or 2. Each circuit can be wired Class A or Class B.

Auxiliary Power Operation – each NAC circuit turns on during power-up supplying continuous, non-resettable, 24 Vdc power to connected devices. During normal standby operation, a maximum of 1 Amp total can be drawn from all four NACs and the AUX output circuit combined. During Alarm operation, a maximum of 10 amps @ 120/240 Vac or 8 Amps @ 100 Vac total can be drawn from all four NACs and the AUX output circuit combined. The RPS has a separate 1 Amp @ 24 Vdc auxiliary output that can be used to power internal addressable modules.

Door Holder Operation – all four NAC circuits turn on during power up supplying continuous 24 Vdc to connected door holders. During normal standby operation, a maximum of 1 Amp maximum can be drawn from all four NACs and the AUX output circuit combined. The circuits will turn off immediately upon activation of control Input 1. The circuits can be configured so that upon loss of AC power to the power supply, the four circuits will automatically turn off after 30 seconds.

The RPS is equipped with eight on-board diagnostic LEDs: one for loss of AC power, one for ground fault, one for battery fault, one for general trouble, and one for each NAC fault. A fail-safe (normally energized) trouble relay will activate to provide indication to the host control panel should any of these conditions occur. A buzzer is provided to provide an audible indication of the unit's operational status.

Activation of the RPS is accomplished by connecting a 12 to 30 Vdc (FWR and unfiltered) input to RPS control Input 1 or 2. If using a notification appliance circuit (NAC) to activate the RPS, the circuit is classified as a control circuit, which means no NAC devices can be connected to the circuit. Each of the four NAC (output) circuits can be assigned to operate independently upon activation of either Input 1 or 2. Loss of input signal to the RPS will cause the RPS to turn off.

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The RPS provides two configuration options that allow it to be setup as a Generator or Follower for synchronization of all four of its notification appliance circuits. In the Generator mode, the RPS generates the sync pulse for System Sensor, Gentex, or Cooper-Wheelock appliances, based on DIP-switch selection. In the Follower mode, the RPS will follow the signal (continuous or modulated) supplied to the units control Input 1 and/or 2. This includes any sync pulse generated by the host control panel or another RPS in generator mode. The sync pulse generated by the host control panel or RPS in generator mode can be used to provide the control input (with sync pulse) for up to ten cascaded power supplies. However, the cascaded power supplies will not be synched with the control input source.

## Specifications

Enclosure	
Material:	18 gauge steel
Finish:	Red, enamel finish
Weight:	14 lbs. (6.35 kg)
Mounting:	Surface or flush
Module mounting:	Up to four addressable modules
Circuit Board	
Power output:	10 Amps maximum (Alarm)
Input current:	35 mA @ 24 Vdc (standby) 141 mA @ 24 Vdc (alarm)
Operating temp.:	32 - 120°F (0 - 49°C)
Humidity:	93% RH, non-condensing
AC input:	100Vac or 120/240Vac 50/60Hz
Battery input:	35AH charging capacity <sup>1</sup>
Trouble relay (failsafe):	Form C, SPDT, normally energized 2A @ 30Vdc 0.5A @ 120Vac
NAC (1 – 4):	3A max. per circuit @ 24Vdc Class B or Class A 10A max. total all NACs
Input (1 -2):	12 – 30Vdc (FWR and unfiltered) 2mA input current Configurable for selective silence Electrically isolated
Aux Out:	1A @ 18.6 – 28.5Vdc output Power-limited and non-supervised

<sup>1</sup> Up to 18AH batteries in cabinet. Up to 35AH batteries with external battery cabinet.

## Approvals

Underwriters Laboratories (UL), 864 9<sup>th</sup> Edition  
Factory Mutual (FM)  
California State Fire Marshal (CSFM)

*For exact certification listings, please reference the respective agency web site.*

## Ordering Information

Part Number	Description
10-2829-1-0-01-0-1-01	Remote power supply kit (includes enclosure and PCB board)
10-2767	Remote power supply, circuit board
02-13527	Circuit board, mounting hardware
10-2782-1-0-01-0-1-01	Remote power supply enclosure
02-13061	10 A glass tube fuse, AC input (F2) <sup>1</sup> mfg. P/N Littlefuse 0477010.MPX
02-4174	15 A fast mini auto fuse, battery input (F1)
02-13081	4A glass tube fuse, NAC outputs (F3-F6)
02-13542	1A glass tube fuse, AUX output (F7)
02-12392	Addressable Module, mounting hardware
02-4622	Battery, 12AH (2 required)
02-2820	Battery, 18AH (2 required)
02-3468	Battery, 33AH (2 required)
10-2154	Battery enclosure, 33 AH
02-1973	NAC circuit EOL, 1K Ω

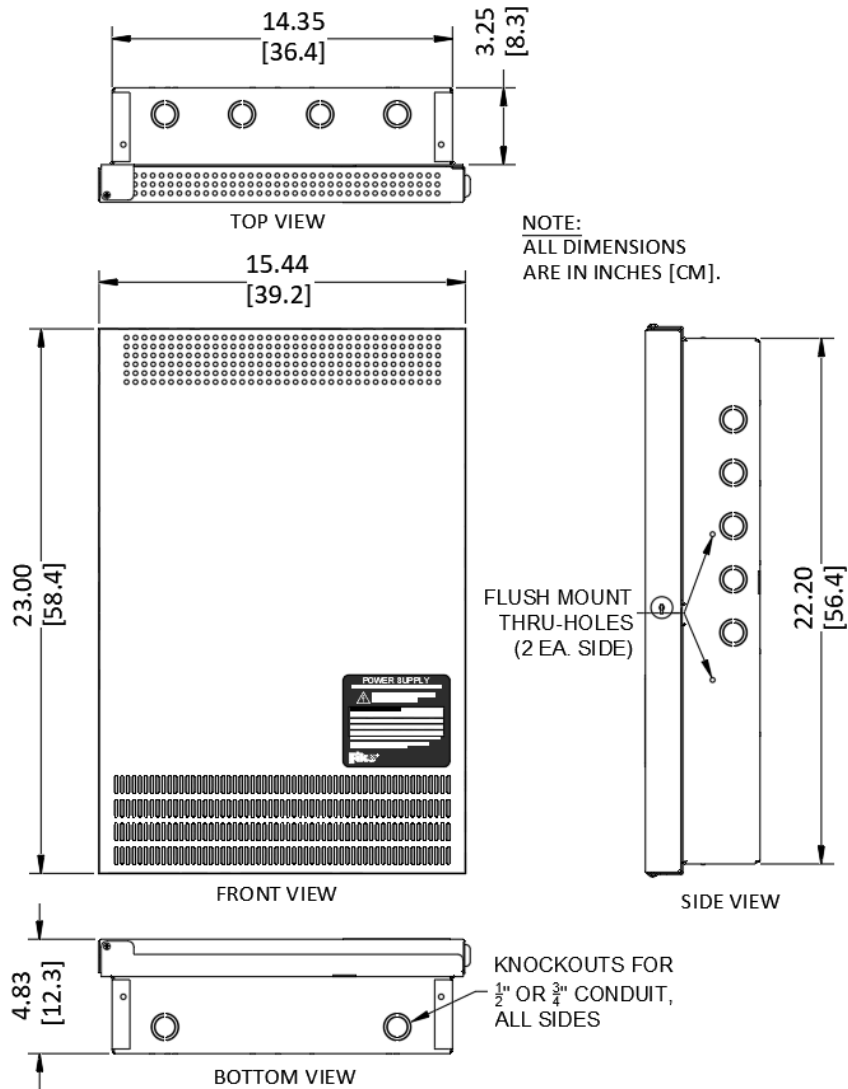
### Notes:

<sup>1</sup> Must be ordered from Fike or replaced with mfg. part number called out above.

<sup>2</sup> Batteries larger than 12 AH must be housed in separate battery enclosure.

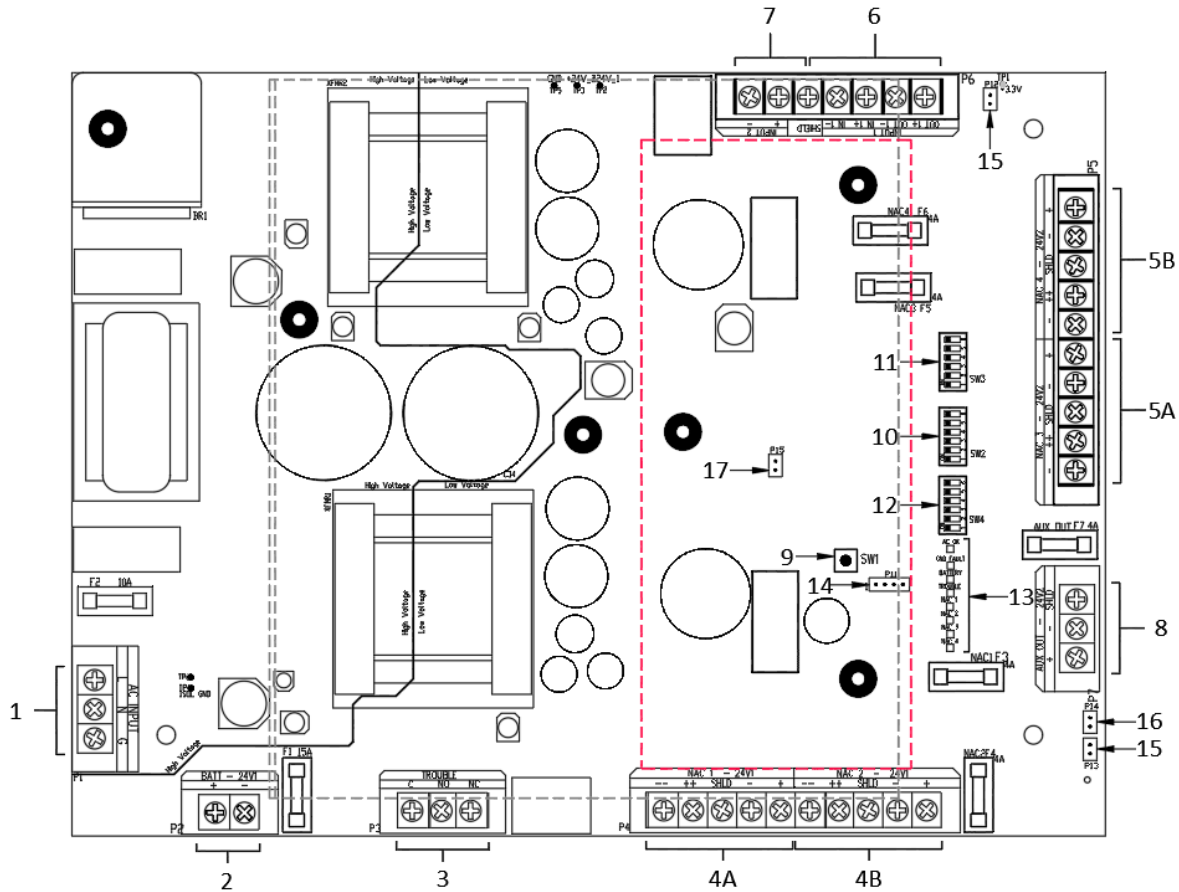
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# Enclosure Dimensions



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## Circuit Board Layout



- |                   |   |
|-------------------|---|
| 1 – AC Input      | 10 – Configuration Dip-switches (output 1 and 2)    |
| 2 – Battery Input | 11 – Configuration Dip-switches (general operation) |
| 3 – Trouble Relay | 12 – Configuration Dip-switches (output 3 and 4)    |
| 4 – NAC 1 and 2   | 13 – Diagnostic LEDs                                |
| 5 – NAC 3 and 4   | 14 – Programming Header (factory use only)          |
| 6 – Input 1       | 15 – Ground Fault Jumpers                           |
| 7 – Input 2       | 16 – Piezo Enable/Disable                           |
| 8 – Aux Out       | 17 – AC Power Input Jumper                          |
| 9 – Reset Switch  |   |

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