

# System Power Requirements

## FCPS-24s8 Power Supply

|  |                            |
|--|----------------------------|
| Protected Premises: <u>537 Congress Street 3rd Floor Fire Alarm Addition</u> | Date: <u>2/10/2014</u>     |
| Address: <u>537 Congress Street</u>  |                            |
| City: <u>Portland</u> State: <u>ME</u>                                       | Zip: <u>04101</u>          |
| Prepared By: <u>Norris Inc.</u>  | Phone: <u>207-883-3473</u> |
| Address: <u>2257 Broadway</u> Email: _____                                   |                            |
| City: <u>South Portland</u> State: <u>ME</u>                                 | Zip: <u>04106</u>          |

**AC Branch Current Requirements** 3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

**Primary Standby Load** 0.09 Amps

Current load on the primary power supply during non-alarm conditions.

**Primary Alarm Load** 1.85 Amps

Current load on the primary power supply during alarm conditions.

**Secondary Load Requirements** 2.06 Amp Hours

Total Secondary Load from the calculation table below.

| Current Draw                             |   | Time (hours)                | Total (AH)  |
|--|---|-----------------------------|-------------|
| <b>Secondary Standby Load</b><br>0.065 A | x | Required Standby Time       |             |
|  |   | 24 hours                    | 1.56        |
| <b>Secondary Alarm Load</b><br>1.845 A   | x | Required Alarm Time (hours) |             |
|  |   | 0.084 hours                 | 0.15        |
| Total Secondary Load                     |   |                             | 1.71        |
| Derating factor                          |   |                             | x 1.2       |
| <b>Secondary Load Requirements</b>       |   |                             | <b>2.06</b> |

AH

**Battery Selection** 7 Amp Hours

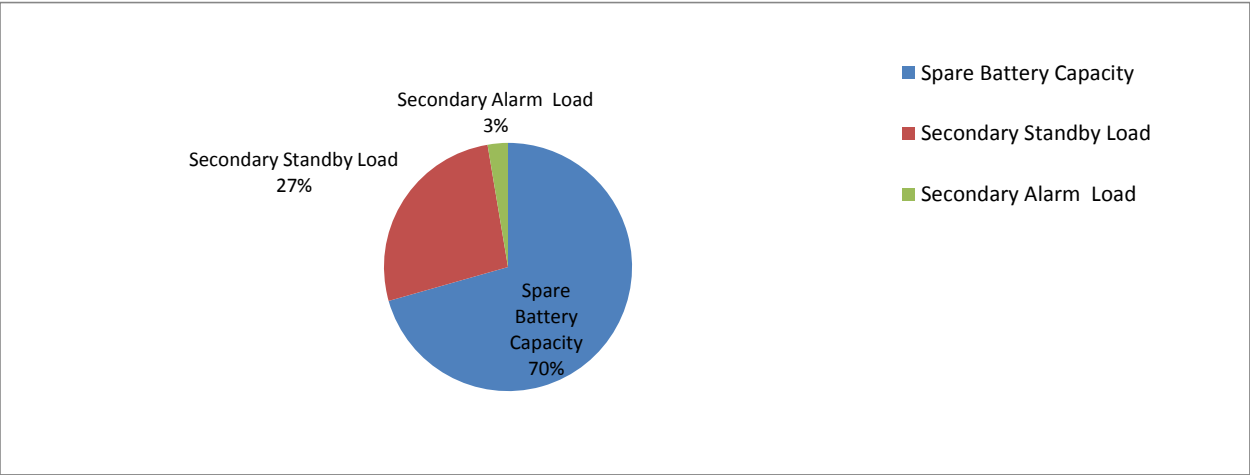
Select batteries from the list below.

7 AH BAT-1270 Battery (12 volt)

- Two     Four (two 12VDC sets in parallel)

**Battery Distribution Chart**

Shows amp-hour distribution of your selections.



**Comments**

- 1. Batteries will fit in the FACP cabinet.
- 2. Selected battery size meets secondary load requirements.
- 3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

|                        |      |   |
|------------------------|------|---|
| Spare Battery Capacity | 4.94 | Battery Selection (AH) - Secondary Load Requirements (AH) |
| Secondary Standby Load | 1.87 | Secondary Standby Load (AH) * Derating Factor             |
| Secondary Alarm Load   | 0.19 | Secondary Alarm Load (AH) * Derating Factor               |