

# System Power Requirements

## FCPS-24s8 Power Supply

Protected Premises: <u>USM Science Building Office Renovation</u>	Date: <u>4/14/2017</u>
Address: <u>Portland Campus</u>	
City: <u>Portland</u> State: <u>ME</u>	Zip: <u>04103</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** 1.18 Amps

Current load on the primary power supply during alarm conditions.

**Secondary Load Requirements** 1.99 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
<b>Secondary Standby Load</b> 0.065 A	x	Required Standby Time	
		24 hours	1.56
<b>Secondary Alarm Load</b> 1.183 A	x	Required Alarm Time (hours)	
		0.084 hours	0.10
Total Secondary Load			1.66
Derating factor			x 1.2
<b>Secondary Load Requirements</b>			<b>1.99</b>

AH

**Battery Selection** 7 Amp Hours

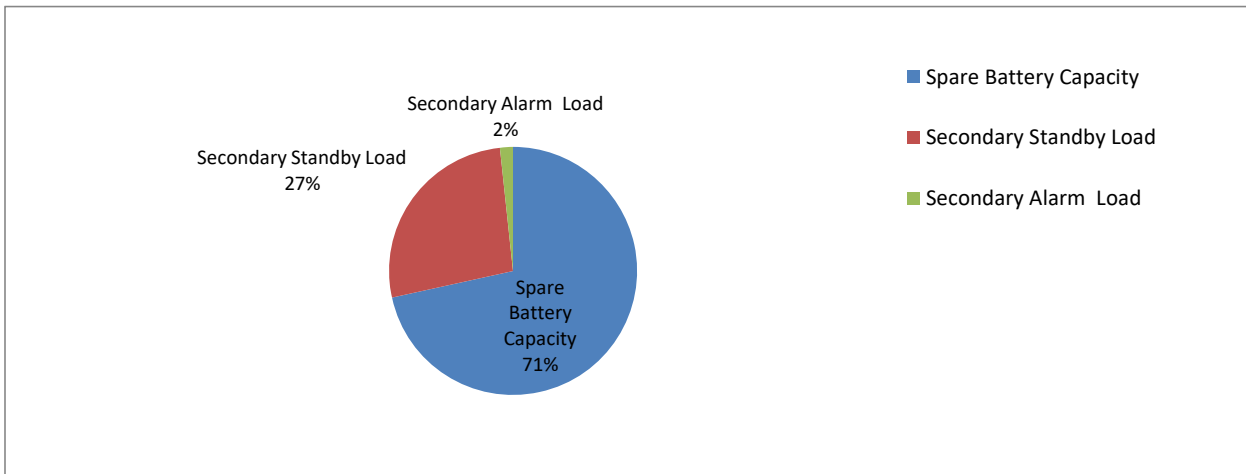
Select batteries from the list below.

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	5.01	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.12	Secondary Alarm Load (AH) * Derating Factor