



## System Current Draw - HPF24S8

Total Current	
C1	0.091 A
C2	5.317 A
C3	0.065 A

Device	C1 - Non-Alarm Current			C2 - Alarm Current			C3 - Secondary Non-Alarm					
	Qty	Draw	Non-Alarm	Qty	Draw	Alarm	Qty	Draw	Non-Alarm			
<b>1. System Modules</b>												
HPF24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500
Power Supervision Relay	0	x	0.02500		0	x	0.02500		0	x	0.02500	
<b>2. NAC1-1</b>												
	1	x	0.00000	0.00000	1	x	1.55800	1.55800	1	x	0.00000	0.00000
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
<b>NAC #1 Totals (Max 3 Amps):</b>			0.00000				1.55800				0.00000	
<b>3. NAC1-2</b>												
	1	x	0.00000	0.00000	1	x	1.31200	1.31200	1	x	0.00000	0.00000
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
<b>NAC #2 Totals (Max 3 Amps):</b>			0.00000				1.31200				0.00000	
<b>4. NAC1-3</b>												
	1	x	0.00000	0.00000	1	x	1.17600	1.17600	1	x	0.00000	0.00000
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
<b>NAC #3 Totals (Max 3 Amps):</b>			0.00000				1.17600				0.00000	
<b>5. NAC1-4</b>												
	1	x	0.00000	0.00000	1	x	1.12600	1.12600	1	x	0.00000	0.00000
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
	0	x	0.00000		0	x	0.00000		0	x	0.00000	
<b>NAC #4 Totals (Max 3 Amps):</b>			0.00000				1.12600				0.00000	
<b>6. Auxiliary Power</b>												
Auxiliary Device	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Auxiliary Device	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Auxiliary Device	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Auxiliary Device	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Auxiliary Device	0	x	0.00000		0	x	0.00000		0	x	0.00000	
<b>7. Compatible Devices not listed</b>												
Other compatible devices	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Other compatible devices	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Other compatible devices	0	x	0.00000		0	x	0.00000		0	x	0.00000	
<b>Total Non-Alarm Load:</b>			<b>0.091</b>		<b>Total Alarm Load:</b>			<b>5.317</b>	<b>Total Secondary Non-Alarm Load:</b>		<b>0.065</b>	



## System Power Requirements

### HPF24S8 Power Supply #1

Protected Premises: <u>SUM LARGE CORP.</u>	Date: <u>9/12/2011</u>
Address: <u>343 INDUSTRIAL BLVD.</u>	
City: <u>KANSAS CITY</u> State: <u>KS</u>	Zip: <u>84518</u>
Prepared By: <u>FIRE SYSTEMS DESIGN GROUP</u>	Phone: <u>(405) 254-5030</u>
Address: <u>P.O. Box 31131</u>	Email: _____
City: <u>Edmond</u> State: <u>OK</u>	Zip: <u>73003</u>

**Primary Standby Load** 0.09 Amps

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

**Primary Alarm Load** 5.32 Amps

Current load on the primary power supply during **alarm** conditions.

**Secondary Load Requirements** 8.60 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
<b>Secondary Standby Load</b>	x	Required Standby Time	
0.065 A		24 hours	1.56
<b>Secondary Alarm Load</b>	x	Required Alarm Time (hours)	
5.317 A		1.000 hours	5.32
		Total Secondary Load	6.88
		Derating factor	x 1.25
		<b>Secondary Load Requirements</b>	<b>8.60</b> AH

**Battery Selection** 12 Amp Hours

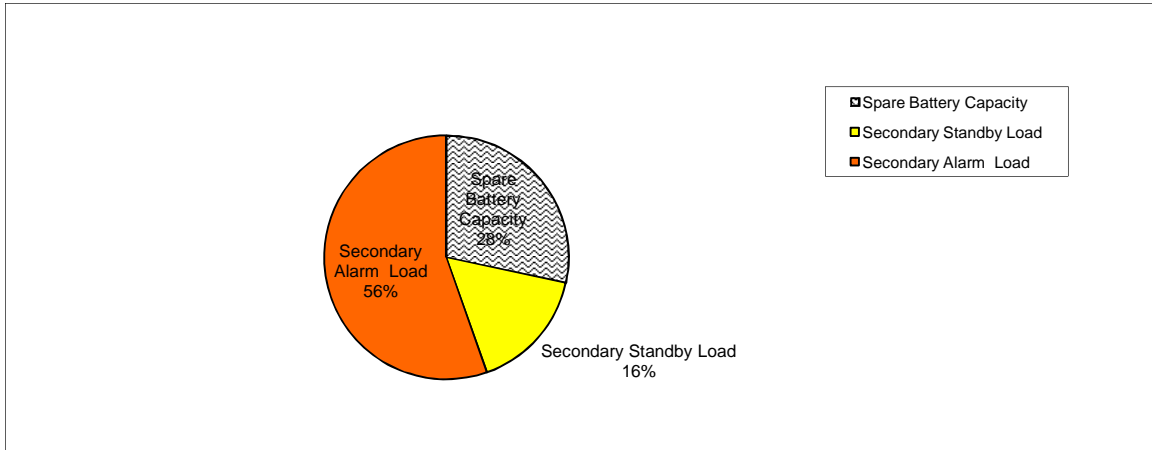
Select batteries from the list below.

12 AH BAT-12120 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 (7-26AH).

Spare Battery Capacity	3.40	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.95	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	6.65	Secondary Alarm Load (AH) * Derating Factor