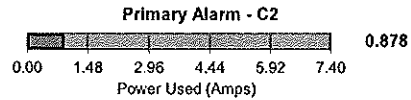
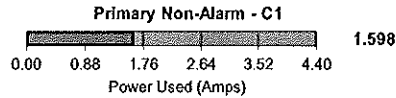


## System Current Draw - NFS2-640

Total Current	
C1	1.598 A
C2	0.878 A
C3	1.560 A
C4	0.918 A



Device	C1 - Primary Non-Alarm			C2 - Primary Alarm			C3 - Secondary Non-Alarm		
	Qty	Draw	Total	Qty	Draw	Total	Qty	Draw	Total
CPU2-640	1	x 0.25000	0.25000	1	x 0.25000	0.25000	1	x 0.25000	0.25000
CPS-24	1	x 0.00000	0.00000	1	x 0.00000	0.00000	1	x 0.04000	0.04000
SLC1 Device Activation Current	1	x 0.40000	0.40000	1	x 0.40000	0.40000	1	x 0.40000	0.40000
FDU-80	2	x 0.06400	0.12800	2	x 0.06400	0.12800	2	x 0.02500	0.05000
CO1224T	39	x 0.02000	0.78000	<del>1</del>	<del>x</del>	<del>0.10000</del>	39	x 0.02000	0.78000
UDACT	1	x 0.04000	0.04000	1	x 0.10000	0.10000	1	x 0.04000	0.04000
<b>Total Non-Alarm Load:</b>			<b>1.598</b>	<b>Total Alarm Load:</b>		<b>0.878</b>	<b>Total Standby Load:</b>		<b>1.560</b>

C4 - Maximum Secondary Fire Alarm Current Draw			
Only include those additional power supplies that are backed up by the control panels batteries.			
Device	Qty	Draw	Total
Total Primary Alarm Load - C2		0.878	0.878
CPS-24	1	x 0.040	0.040
NCA2 - Backlight Off with loss of AC	0	x -0.200	
APS-6R Power Supplies	<del>1</del>		0.000
APS2-6R Power Supplies	<del>1</del>		0.000
ACPS-610 Power Supplies	<del>1</del>		0.000
FCPS-24S6 Power Supplies	<del>1</del>		0.000
FCPS-24S8 Power Supplies	<del>1</del>		0.000
HPFF8 Power Supplies	<del>1</del>		0.000
HPFF12 Power Supplies	<del>1</del>		0.000
DAA2 Series	<del>1</del>		0.000
DAX Series	<del>1</del>		0.000
DAA Series	<del>1</del>		0.000
DS-DB	<del>1</del>		0.000
FireVoice Panels	<del>1</del>		0.000
FireVoice Distributed Audio Panels	<del>1</del>		0.000
XPIQ	<del>1</del>		0.000
AA-30	0	x 3.000	
AA-120	0	x 7.300	
Other Power Supply	0	x 0.000	
Other Power Supply	0	x 0.000	
<b>Total Standby Alarm Load:</b>			<b>0.918</b>



# System Power Requirements

Notifier NFS2-640 Fire Alarm Control Panel

Protected Premises: <u>Seaside Rehab and Healthcare</u>	Date: <u>1/17/2013</u>
Address: <u>850 Baxter Blvd</u>	
City: <u>Portland</u> State: <u>Maine</u> Zip: _____	
Prepared By: <u>Norris Inc.</u>	Phone: _____
Address: <u>2257 West Broadway</u> Email: _____	
City: <u>South Portland</u> State: <u>Maine</u> Zip: <u>04106</u>	

**AC Branch Current Requirements** 5.00 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

**Primary Standby Load** 1.60 Amps

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

**Primary Alarm Load** 0.88 Amps

Current load on the primary power supply during alarm conditions.

**Secondary Load Requirements** 45.20 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 1.560 A	x	Required Standby Time	
		24 hours	37.44
Secondary Alarm Load 0.918 A	x	Required Alarm Time	
		0.250 hours	0.23
Total Secondary Load			37.67
Derating factor			x 1.2
<b>Secondary Load Requirements (Amp Hours)</b>			<b>45.20</b> AH

**Battery Selection** 55 Amp Hours

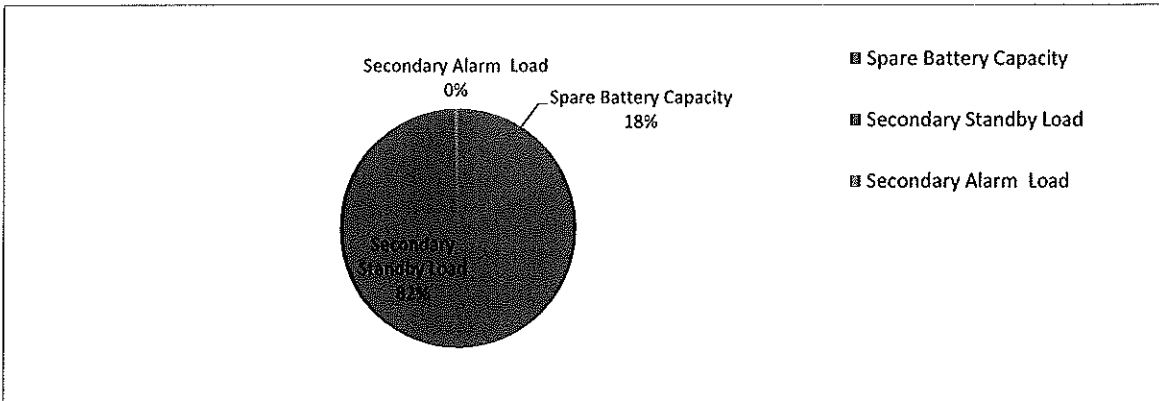
Select batteries from the list below.

55 AH BAT-12550 Battery (12 volt)

- Two       Four (two 12VDC sets in parallel)

### Battery Distribution Chart

Shows amp-hour distribution of your selections.



### Comments

1. Battery size exceeds FACP capacity. BB-55 or other external battery box
2. Selected battery size meets secondary load requirements.
3. The selected batteries (55AH) are within the charger range of this power supply (18-200AH).

Spare Battery Capacity	9.80	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	44.93	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.28	Secondary Alarm Load (AH) * Derating Factor



## System Current Draw - FCPS-24s8

Total Current	
C1	0.091 A
C2	3.338 A
C3	0.065 A

Select devices using the "Qty" column.

Use yellow cells to enter quantities and current values.

To show only selected devices, select "Show Selected Devices".

To clear selected devices, select "Clear Selections".

Device	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm					
	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm		
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500		
HSR15	22	x	0.00000	0.00000	22	x	0.08200	1.80400	22	x	0.00000	0.00000		
STR15	19	x	0.00000	0.00000	19	x	0.05700	1.08300	19	x	0.00000	0.00000		
HSR30	3	x	0.00000	0.00000	3	x	0.10200	0.30600	3	x	0.00000	0.00000		
<b>Total Non-Alarm Load:</b>				<b>0.091</b>	<b>Total Alarm Load:</b>				<b>3.338</b>	<b>Total Standby Load:</b>				<b>0.065</b>

## System Power Requirements

### FCPS-24s8 Power Supply

Protected Premises: Seaside Rehab and Healthcare FCPS 1st floor		Date: _____
Address: 850 Baxter Blvd		
City: Portland	State: Maine	Zip: _____
Prepared By: Norris Inc		Phone: _____
Address: 2257 West Broadway		Email: _____
City: South Portland	State: Maine	Zip: 04106

**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**      3.34 Amps

Current load on the primary power supply during alarm conditions.

**Secondary Load Requirements**      2.87 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time 24 hours	1.56
Secondary Alarm Load 3.338 A	x	Required Alarm Time (hours) 0.250 hours	0.83
Total Secondary Load			2.39
Derating factor			x 1.2
<b>Secondary Load Requirements</b>			<b>2.87</b>

**Battery Selection**      7 Amp Hours

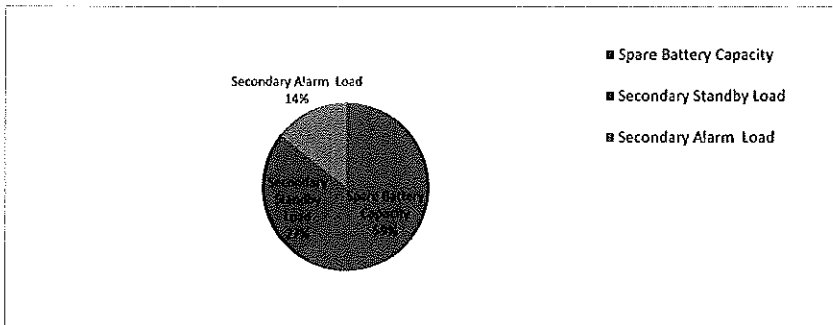
Select batteries from the list below.

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	4.13	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	1.00	Secondary Alarm Load (AH) * Derating Factor



## System Current Draw - FCPS-24s8

Total Current	
C1	0.091 A
C2	3.298 A
C3	0.065 A

Select devices using the "Qty" column.

Use yellow cells to enter quantities and current values.

To show only selected devices, select "Show Selected Devices".

To clear selected devices, select "Clear Selections".

Device	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm					
	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm		
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500		
HSR15	24	x	0.00000	0.00000	24	x	0.08200	1.96800	24	x	0.00000	0.00000		
STR15	19	x	0.00000	0.00000	19	x	0.05700	1.08300	19	x	0.00000	0.00000		
HSR30	1	x	0.00000	0.00000	1	x	0.10200	0.10200	1	x	0.00000	0.00000		
<b>Total Non-Alarm Load:</b>				<b>0.091</b>	<b>Total Alarm Load:</b>				<b>3.298</b>	<b>Total Standby Load:</b>				<b>0.065</b>

## System Power Requirements

### FCPS-24s8 Power Supply

Protected Premises: Seaside Rehab and Healthcare FCPS 2nd floor		Date: _____	
Address: 850 Baxter Blvd			
City: Portland	State: Maine	Zip: _____	
Prepared By: Norris Inc		Phone: _____	
Address: 2257 West Broadway		Email: _____	
City: South Portland	State: Maine	Zip: 04106	

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

Current required by source to power the fire alarm system.

**Primary Standby Load**       Amps

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

**Primary Alarm Load**       Amps

Current load on the primary power supply during alarm conditions.

**Secondary Load Requirements**       Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time 24 hours	1.56
Secondary Alarm Load 3.298 A	x	Required Alarm Time (hours) 0.250 hours	0.82
Total Secondary Load			2.38
Derating factor			x 1.2
<b>Secondary Load Requirements</b>			<b>2.86</b> AH

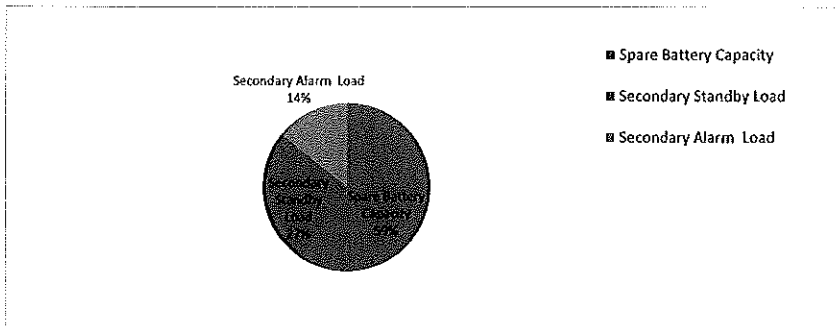
**Battery Selection**       Amp Hours

Select batteries from the list below.

Two       Four (two 12VDC sets in parallel)

**Battery Distribution Chart**

Shows amp-hour distribution of your selections.



**Comments**

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

Spare Battery Capacity	4.14	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.99	Secondary Alarm Load (AH) * Derating Factor