



System Power Requirements

Notifier NFS2-640 Fire Alarm Control Panel

Protected Premises: <u>USM - Payson Smith Building</u>	Date: <u>7/8/2013</u>
Address: _____	
City: <u>Portland</u>	State: <u>Maine</u> Zip: _____
Prepared By: <u>BK Systems, Inc.</u>	Phone: <u>603-647-8775</u>
Address: <u>4 Cote Avenue</u>	Email: _____
City: <u>Goffstown</u>	State: <u>New Hampshire</u> Zip: <u>03045</u>

AC Branch Current Requirements 5.00 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load 1.18 Amps

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

Primary Alarm Load 1.55 Amps

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

Secondary Load Requirements 35.44 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 1.219 A	x	Required Standby Time	
		24 hours	29.27
Secondary Alarm Load 1.590 A	x	Required Alarm Time	
		0.167 hours	0.27
Total Secondary Load			29.53
Derating factor			x 1.2
Secondary Load Requirements (Amp Hours)			35.44 AH

Battery Selection 55 Amp Hours

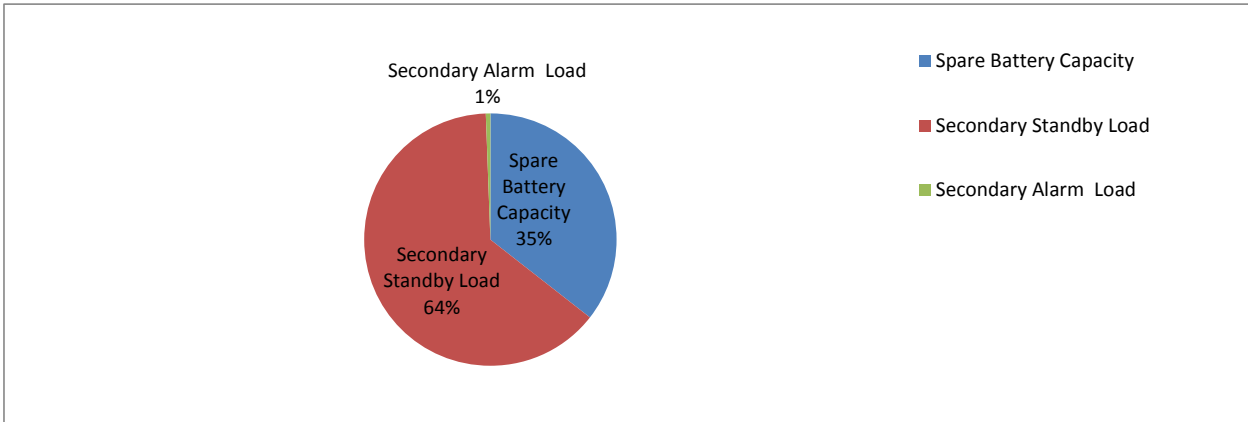
Select batteries from the list below.

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	19.56	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	35.12	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	0.32	Secondary Alarm Load (AH) * Derating Factor



Device Current Draw

NFS2-640 Fire Alarm Control Panel

Quantity x [device current draw] = total current draw per device (in amps)

Part Number	Qty	Primary Non-Alarm	Primary Alarm	Secondary Non-Alarm
CPU2-640	1	x [0.25000] = 0.25000	x [0.25000] = 0.25000	x [0.25000] = 0.25000
CPS-24	1	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.04000] = 0.04000
NCA2 - Backlight On	1	x [0.40000] = 0.40000	x [0.40000] = 0.40000	x [0.40000] = 0.40000
HPFF8 Power Supplies	2	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
DAA Series	2	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] =
DVC-EM	1	x [0.44000] = 0.44000	x [0.44000] = 0.44000	x [0.44000] = 0.44000
DVC-KD	1	x [0.06000] = 0.06000	x [0.06000] = 0.06000	x [0.06000] = 0.06000
NBG-12LX	17	x [0.00038] = 0.00638	x [0.00000] = 0.00000	x [0.00038] = 0.00638
FSP-851	34	x [0.00030] = 0.01020	x [0.00000] = 0.00000	x [0.00030] = 0.01020
FST-851	26	x [0.00030] = 0.00780	x [0.00000] = 0.00000	x [0.00030] = 0.00780
DNR	1	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
FSP-851R	1	x [0.00030] = 0.00030	x [0.00000] = 0.00000	x [0.00030] = 0.00030
RTS151	1	x [0.00000] = 0.00000	x [0.00000] = 0.00000	x [0.00000] = 0.00000
FMM-1	5	x [0.00035] = 0.00175	x [0.00000] = 0.00000	x [0.00035] = 0.00175
FMM-101	2	x [0.00035] = 0.00070	x [0.00000] = 0.00000	x [0.00035] = 0.00070
FRM-1	9	x [0.00026] = 0.00230	x [0.00000] = 0.00000	x [0.00026] = 0.00230
SLC Loop Device Activation Current	1	x [0.00000] = 0.00000	x [0.40000] = 0.40000	x [0.00000] = 0.00000
Total (Amperes):		1.1794 A	1.5500 A	1.2194 A

Part Number	Qty	Secondary Alarm
Total Primary Alarm Load - C2	1	x [1.55000] = 1.55000
CPS-24	1	x [0.04000] = 0.04000
Total (Amperes):		1.5900 A