

PSE-6 Battery Calculation

Secondary Power Source Requirements

	Standby Current (amps)					Secondary Alarm Current (amps)					
Device Type	Qty		Current Draw		Total	Qty		Current Draw		Total	
Main Circuit Board	1	X	0.1390	=	0.1390	1	X	0.1570	=	0.1570	
Choose EOLR used ↓											
4.7k											
Main Circuit Board with ZNAC-PS Class A card	0	X	0.1350	=	0.0000	0	X	0.1420	=	0.0000	
NAC / Output # 1	1	X	0.0000	=	0.0000	1	X	0.3780	=	0.3780	
NAC / Output # 2	1	X	0.0000	=	0.0000	1	X	0.1840	=	0.1840	
NAC / Output # 3	1	X	0.0000	=	0.0000	1	X	0.1840	=	0.1840	
NAC / Output # 4	1	X	0.0000	=	0.0000	1	X	0.0000	=	0.0000	
NAC / Output # 5	1	X	0.0000	=	0.0000	1	X	0.0000	=	0.0000	
Total Standby Load					0.1390	Total Alarm Load					0.9030

PSE-6 Battery Calculation

Note 1: You are **fully responsible for verifying these calculations.**

Note 2: You only need to make entries in the **yellow** cells

Calculation in Total Sheet

		Required Standby Time in Hours			
		24 Hours			
Standby Load Current (Amps)	0.1390 Amps	X	24	=	3.336 AH
		Required Alarm Time in Hours			
		5 Minutes			
Alarm Load Current (Amps)	0.9030 Amps	X	0.084	=	0.076 AH
Total Current Load					3.41 AH
*Multiply by the Derating Factor		1.2		=	x 1.20
Total Ampere Hours Required					4.09 AH

Recommended Batteries:

BAT-1270 - 7AH Batteries

* Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

PSE-6 Circuit Detail											
NAC / Output # 1											
Device	Qty		Non-Alarm Draw		Total	Qty		Alarm Draw		Total	
P2RLED (95CD)	2	x	0.000000	=	0.000000	2	x	0.092000	=	0.184000	
P2RK (95CD)	1	x	0.000000	=	0.000000	1	x	0.194000	=	0.194000	
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
Total Standby Load					0.000000	Total Alarm Load					0.378000

NAC / Output # 2											
Device	Qty		Non-Alarm Draw		Total	Qty		Alarm Draw		Total	
P2RLED (95CD)	2	x	0.000000	=	0.000000	2	x	0.092000	=	0.184000	
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
Total Standby Load					0.000000	Total Alarm Load					0.184000

NAC / Output # 3										
Device	Qty		Non-Alarm Draw	=	Total	Qty		Alarm Draw	=	Total
P2RLED (95CD)	2	x	0.000000	=	0.000000	2	x	0.092000	=	0.184000
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
	0	x	0.000000	=		0	x	0.000000	=	
Total Standby Load					0.000000	Total Alarm Load				0.184000

NAC / Output # 4											
Device	Qty		Non-Alarm Draw	=	Total	Qty		Alarm Draw	=	Total	
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
Total Standby Load					0.000000	Total Alarm Load					0.000000

NAC / Output # 5											
Device	Qty		Non-Alarm Draw	=	Total	Qty		Alarm Draw	=	Total	
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
	0	x	0.000000	=		0	x	0.000000	=		
Total Standby Load					0.000000	Total Alarm Load					0.000000