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										
Choose EOLR used ↓										
4.7k	1	X	0.1390	=	0.1390	1	X	0.1570	=	0.1570
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	=	
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	=	
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	=	
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	=	
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**