FL-PS10 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	0.1560	=	0.1560	1	X	0.1850	=	0.1850
Main Circuit Board with ZNAC-PS Class A card	0	X	0.1490	=	0.0000	0	X	0.1590	=	0.0000
NAC / Output # 1	1	X	0.0000	=	0.0000	1	X	1.4340	=	1.4340
NAC / Output # 2	1	X	0.0000	=	0.0000	1	X	0.6640	=	0.6640
NAC / Output # 3	1	X	0.0000	=	0.0000	1	X	0.6640	=	0.6640
NAC / Output # 4	1	X	0.0000	=	0.0000	1	X	0.6640	=	0.6640
NAC / Output # 5	1	X	0.0000	=	0.0000	1	X	0.6640	=	0.6640
NAC / Output # 6	1	X	0.0000	=	0.0000	1	X	0.0000	=	0.0000
NAC / Output # 7	1	X	0.0000	=	0.0000	1	X	0.0000	=	0.0000
			Total Standby Load		**0.1560**			**Total Alarm Load**		**4.2750**

FL-PS10 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)	**0.1560 Amps**	X	24	=	3.744 AH
		Required Alarm Time in Hours			
		15 Minutes			
Alarm Load Current (Amps)	**4.2750 Amps**	X	0.25	=	1.069 AH
			Total Current Load		**4.81 AH**
	*Multiply by the Derating Factor	1.2		=	x 1.20
			Total Ampere Hours Required		**5.78 AH**

Recommended Batteries:	**BAT-1270 - 7AH Batteries**

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

FL-PS10 Circuit Detail

NAC / Output # 1

Device	Qty		Non-Alarm Draw		Total	Qty		Alarm Draw		Total
P2RK	6	x	0.000000	=	0.000000	6	x	0.212000	=	1.272000
P2RL-LF	1	x	0.000000	=	0.000000	1	x	0.162000	=	0.162000

	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**				**1.434000**

NAC / Output # 2										
Device	**Qty**	**Non-Alarm Draw**			**Total**	**Qty**	**Alarm Draw**			**Total**
HW-LF	4	x	0.000000	=	0.000000	4	x	0.166000	=	0.664000
	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**				**0.664000**

NAC / Output # 3										
Device	**Qty**	**Non-Alarm Draw**			**Total**	**Qty**	**Alarm Draw**			**Total**
HW-LF	4	x	0.000000	=	0.000000	4	x	0.166000	=	0.664000
	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**				**0.664000**

NAC / Output # 4										
Device	**Qty**	**Non-Alarm Draw**			**Total**	**Qty**	**Alarm Draw**			**Total**
HW-LF	4	x	0.000000	=	0.000000	4	x	0.166000	=	0.664000
	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**				**0.664000**

NAC / Output # 5										
Device	**Qty**	**Non-Alarm Draw**			**Total**	**Qty**	**Alarm Draw**			**Total**
HW-LF	4	x	0.000000	=	0.000000	4	x	0.166000	=	0.664000

	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**				**0.664000**

NAC / Output # 6										
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 # 7										
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**