Note 1: You are **fully responsible for verifying these calculations**.
Note 2: Use the dropdowns in the **yellow** cells to enter values.

FIRE-LITE ALARMS by Honeywell

ES-50X Battery Calculation

Secondary Power Source Requirements

	Standby Current (amps)					Secondary Alarm Current (amps)				
Device	**Qty**		**Current Draw**		**Total**	**Qty**		**Current Draw**		**Total**
Main Circuit Board	1	x	0.141000	=	0.141000	1	x	0.257000	=	0.257000
IPOTS-COM Communicator	0	x	0.040000	=		0	x	0.041000	=	
4XTMF	0	x	0.005000	=		0	x	0.011000	=	
EOLR-1	0	x	0.020000	=		0	x	0.020000	=	
CELL-MOD-FL / CELL-CAB	1	x	0.055000	=	0.055000	1	x	0.100000	=	0.100000
ANN-BUS Devices										
ANN-SEC Card	0	x	0.003000	=		0	x	0.003000	=	
ANN-80(-W)	0	x	0.015000	=		0	x	0.040000	=	
ANN-100	0	x	0.020000	=		0	x	0.025000	=	
ANN-(R)LED	0	x	0.028000	=		0	x	0.068000	=	
ANN-RLY	0	x	0.015000	=		0	x	0.075000	=	
ANN-I/O	0	x	0.035000	=		0	x	0.200000	=	
ANN-I/O LED	0	x	0.000000	=		0	x	0.010000	=	
ANN-S/PG	0	x	0.045000	=		0	x	0.045000	=	
Addressable Devices										
BEAM355	0	x	0.002000	=						
BEAM355S	0	x	0.002000	=						
CP355	0	x	0.000300	=						
SD365CO	0	x	0.002000							
SD355CO	0	x	0.000300	=						
SD355	0	x	0.000300	=						
SD365	1	x	0.000200	=	0.000200					
SD355T	0	x	0.000300	=						
SD365T	0	x	0.000200	=						
H355	0	x	0.000300	=						
H365	0	x	0.000200	=						
H355HT	0	x	0.000300	=						
H365HT	0	x	0.000200	=						
H350R	0	x	0.000300	=						
H355R	0	x	0.000300	=						
H365R	0	x	0.000200	=						
D350RPL	0	x	0.000300	=						
D355PL	0	x	0.000300	=						
MMF-300	3	x	0.000375	=	0.001125					
MMF-300-10	0	x	0.003500	=						
MDF-300	0	x	0.000750	=						
MMF-301	0	x	0.000350	=						
MMF-302	0	x	0.000270	=						
MMF-302-6	0	x	0.002000	=						
BG-12LX	3	x	0.000375	=	0.001125					
CMF-300	0	x	0.000390	=						
CMF-300-6	0	x	0.002250	=						
CRF-300	0	x	0.000255	=						
CRF-300-6	0	x	0.001450	=						
CDRM-300	0	x	0.001300	=						
I300	0	x	0.000400	=						
ISO-6	0	x	0.002700	=						
B501BH-2	0	x	0.001000	=						
B501BHT-2	0	x	0.001000	=						
B224RB	0	x	0.000500	=						
B224BI	0	x	0.000450	=						
W-GATE	0	x	0.024000	=						
Maximum alarm draw for all Addressable devices ---------->										0.20000
Resettable Power										
4-Wire Smoke Detectors	0	x	0.000000	=		0	x	0.000000	=	
SWIFT Wireless										
W-GATE	0	x	0.040000	=		0	x	0.040000	=	
Auxiliary Power										
CMF-300 (Aux. Power)	0	x	0.001700	=		0	x	0.007000	=	
CMF-300-6 (Aux. Power)	0	x	0.008000	=		0	x	0.020000	=	
MMF-302 (Aux. Power)	0	x	0.012000	=		0	x	0.090000	=	
MMF-302-6 (Aux. Power)	0	x	0.050000	=		0	x	0.270000	=	
B200SR (Aux. Power)	0	x	0.000500	=		0	x	0.035000	=	
B200SR-LF (Aux. Power)	0	x	0.001000	=		0	x	0.125000	=	

Miscellaneous Devices										
	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	=	
Output Circuits										
NAC/Output #1			0.000000	=				0.000000	=	
NAC/Output #2			0.000000	=				0.000000	=	
FCPS (remote Sync)	0	x	0.000000	=		0	x	0.021700	=	
			Total Standby Load		**0.198450**			**Total Alarm Load**		**0.557000**

FIRE-LITE ALARMS by Honeywell

ES-50X Battery Calculation

Calculation in Total Sheet

		Required Standby Time in Hours			
		24 Hours			
Total Standby Current	**0.1985 Amps**	x	24	=	4.763 AH
		Required Alarm Time in Minutes			
		5 Minutes			
Total Alarm Load	**0.5570 Amps**	x	0.084	=	0.047 AH
			Total Current Load		**4.810 AH**
	Multiply by the Derating Factor		1.2	=	x 1.20
			Total Ampere Hours Required		**5.77 AH**

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

Battery Check
The batteries can be charged by the ES-50X Charger.
The batteries can be housed in the ES-50X Cabinet.

Current Draw Check
NAC#1 current is within the limitations of the circuit.
NAC#2 current is within the limitations of the circuit.
ES-50X current draw: The required output current is within the panel's limitations

FIRE-LITE ALARMS by Honeywell

ES-50X Circuit Detail

NAC/Output #1

Device	Qty	Non-Alarm Draw		Total	Qty	Alarm Draw		Total
SRL 15	0	x 0.000000	=		0	x 0.043000	=	
P2RL 15	0	x 0.000000	=		0	x 0.054000	=	
P2RL 110	0	x 0.000000	=		0	x 0.162000	=	
P2RK 110	0	x 0.000000	=		0	x 0.212000	=	
		x 0.000000	=		0	x 0.166000	=	
	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 #2

Device	Qty	Non-Alarm Draw		Total	Qty	Alarm Draw		Total
SRL 15	0	x 0.000000	=		0	x 0.043000	=	
P2RL 15	0	x 0.000000	=		0	x 0.054000	=	
P2RL 110	0	x 0.000000	=		0	x 0.162000	=	
PC2RK 30	0	x 0.000000	=		0	x 0.107000	=	
PC2RK 75	0	x 0.000000	=		0	x 0.176000	=	
HW-LF	0	x 0.000000	=		0	x 0.166000	=	
	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**