

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

Device Type		Secondary Non-Alarm Current (amps)			Secondary Alarm Current (amps)					
Qty		Current Draw	Total	Qty	Current Draw	Total				
1. System										
Main Circuit Board	1	x	0.100000	=	0.100000	1	x	0.235000	=	0.235000
4XTMF	0	x	0.005000	=		0	x	0.011000	=	
CAC-5X	0	x	0.001000	=		0	x	0.001000	=	
IPDACT-2	0	x	0.093000	=		0	x	0.136000	=	
IPDACT-2UD	0	x	0.098000	=		0	x	0.155000	=	
2. Annunciators										
ANN-80	0	x	0.015000	=		0	x	0.040000	=	
ANN-RLY	0	x	0.015000	=		0	x	0.075000	=	
ANN-I/O	0	x	0.035000	=		0	x	0.200000	=	
ANN-I/O LEDs	0	x	0.000000	=		0	x	0.010000	=	
ANN-S/PG	0	x	0.045000	=		0	x	0.045000	=	
ANN-(R)LED	0	x	0.028000	=		0	x	0.068000	=	
3. Conventional Detection										
Two-Wire Detector Heads	0	x	0.000000	=						
Four-Wire Detector Heads	0	x	0.000000	=						
Number of IDC's Used Minus 1						0	x	0.040000	=	
EOLR-1	0	x	0.020000	=		0	x	0.020000	=	
4. Other Devices										
Miscellaneous Device 1	0	x	0.000000	=		0	x	0.000000	=	
Miscellaneous Device 2	0	x	0.000000	=		0	x	0.000000	=	
Miscellaneous Device 3	0	x	0.000000	=		0	x	0.000000	=	
Miscellaneous Device 4	0	x	0.000000	=		0	x	0.000000	=	
Miscellaneous Device 5	0	x	0.000000	=		0	x	0.000000	=	
5. Notification Appliances										
NAC 1						0	x	0.000000	=	
NAC 2						0	x	0.000000	=	
NAC 3						0	x	0.000000	=	
NAC 4						0	x	0.000000	=	
Current Draw from TB9 (nonalam)	0	x	0.000000	=		0	x	0.000000	=	
Total Standby Load			0.100000		Total Alarm Load			0.235000		

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Qty		Current Draw	Total	Qty	Current Draw	Total	
MS-5UD-3 Battery Calculation							
Calculation in Total Sheet							
						Required Standby Time in Hours	
						24 Hours	
Standby Load Current	0.10000 Amps			x	24	=	2.400 AH
						Required Alarm Time in Minutes	
						5 Minutes	
Alarm Load Current (Amps)	0.23500 Amps			x	0.084	=	0.020 AH
						Total Current Load	
						2.420 AH	
Multiply by the Derating Factor					1.2	=	x 1.20
						Total Ampere Hours Required	
						2.90 AH	
Recommended Batteries:				BAT-1270 - 7AH Batteries			

Battery Check
 The batteries can be charged by the MS-5UD-3 Charger.
 The batteries can be housed in the MS-5UD-3 Cabinet.

Current Draw Check
 NAC#1 current is within the limitations of the circuit.
 NAC#2 current is within the limitations of the circuit.
 NAC#3 current is within the limitations of the circuit.
 NAC#4 current is within the limitations of the circuit.
 MS-5UD-3 Control Panel:
 The output current is within the panel's limitations.