FIRE-LITE ALARMS

MS-9050UD Battery Calculation

Note 1: You can edit all current draws and are **fully responsible for verifying these calculations**.
Note 2: You only need to make entries in the **yellow** cells

Regulated Load in Standby

Device Type	Number of Devices		Current (Amps)		Total Current (Amps)
Main Circuit Board	1	x	0.120000	=	0.120000
4XTMF	0	x	0.005000	=	
4-Wire Smoke Detectors [1]	0	x	0.000000	=	
Power Supervision Relays [2]	0	x	0.025000	=	
ANN-80	0	x	0.037000	=	
ANN-I/O	0	x	0.035000	=	
ANN-I/O LEDs	0	x	0.000000	=	
ANN-S/PG	0	x	0.045000	=	
Addressable Devices					
BEAM355 and BEAM355S	0	x	0.002000	=	
BEAM 1224	0	x	0.017000	=	
CP355	0	x	0.000300	=	
SD355	1	x	0.000300	=	0.000300
SD355T	0	x	0.000300	=	
AD355	0	x	0.000300	=	
H355	0	x	0.000300	=	
H355R	18	x	0.000300	=	0.005400
H355HT	1	x	0.000300	=	0.000300
D350P	0	x	0.000300	=	
D350RP	0	x	0.000300	=	
MMF-300	1	x	0.000400	=	0.000400
MMF-300-10	0	x	0.003500	=	
MDF-300	0	x	0.000750	=	
MMF-301	0	x	0.000375	=	
MMF-302	0	x	0.000270	=	
MMF-302-6	0	x	0.002000	=	
BG-12LX	3	x	0.000230	=	0.000690
CMF-300	0	x	0.000390	=	
CMF-300-6	0	x	0.002250	=	
CRF-300	0	x	0.000270	=	
CRF-300-6	1	x	0.001450	=	0.001450
I300	3	x	0.000400	=	0.001200
B501BH & B501BHT [3]	0	x	0.001000	=	
B224RB Relay Base	0	x	0.000500	=	
B224BI Isolator Base	0	x	0.000450	=	
Current Draw from TB3 - EIA-485			0.000000		
			[4] **Total Standby Load**		**0.129740**

Warren Armory

Notes:
1) Refer to the Device Compatibility Document for standby current
2) Must use compatible listed Power Supervision Relay
3) Maximum alarm current for each sounder base is 0.015 amps which must be supplied by aux. 24VDC source.
4) Total current draw listed cannot exceed 2.7 amps

FIRE-LITE ALARMS

MS-9050UD Battery Calculation

Note 1: You can edit all current draws and are **fully responsible for verifying these calculations**.
Note 2: You only need to make entries in the **yellow** cells

Regulated Load in ALARM

Device Type	Number of Devices		Current (Amps)		Total Current (Amps)
Main Circuit Board	1	x	0.200000	=	0.200000
4XTMF [1]	0	x	0.011000	=	
4-Wire Smoke Detectors	0	x	0.000000	=	
Power Supervision Relays	0	x	0.000000	=	
ANN-80	0	x	0.040000	=	
ANN-I/O	0	x	0.200000	=	
ANN-I/O LEDs	0	x	0.010000	=	
ANN-S/PG	0	x	0.045000	=	
ALL Addressable Devices - Maximum draw	1	x	0.400000	=	0.400000
NAC #1 [2]	1	x	0.924000	=	0.924000
NAC #2	1	x	1.164000	=	1.164000
Current Draw from TB3 - EIA-485			0.000000	=	
				[3]Total Alarm Load	**2.688000**

Notes:
1) If using the Reverse Polarity Alarm output, add 0.005 amps; if using the Reverse Polarity Trouble output, add another 0.005 amps.
2) Current limitations for NAC circuits TB1 is 2.5 amps per circuit
3) Total alarm current cannot exceed 2.7 amps

FIRE-LITE ALARMS

MS-9050UD Battery Calculation

Note 1: You can edit all current draws and are **fully responsible for verifying these calculations**.
Note 2: You only need to make entries in the **yellow** cells

Calculation in Total Sheet

Use the total standby and alarm load currents calculated in tables A-2A and A-2B for the following battery calculations

			Required Standby Time in Hours (24 or 60 Hrs.)		
Standby Load Current (Amps)	0.129740	x	60	=	7.784 AH
			Required Alarm Time in Hours (5 minutes = 0.084)		
Alarm Load Current (Amps)	2.688000	x	0.084	=	0.226 AH
			Total Current Load		**8.010 AH**
		Multiply by the Derating Factor	1.2	=	x 1.20
			Total Ampere Hours Required		**9.612 AH**

Battery Check
The MS-9050UD can charge this size battery
The batteries can be stored in the cabinet

Current Draw Check
NAC#1 current is within the limitations of the circuit.
NAC#2 current is within the limitations of the circuit.
MS-9050UD current draw:
The required output current is within the panel's limitations

Notification Appliance Circuit Loading

Warren Armory

	Ckt #	Device Load (Area Served)	15cd H/S 0.088	30cd H/S 0.112	75cd H/S 0.168	110cd H/S 0.210	Horn 0.015 on low	15cd Strobe 0.071	110cd Strobe 0.195	Sync Module 0.015		Total Ckt Current Draw in amps	Total Ckt Capacity in amps	% Load of Capacity
FACP														
	1	East			3	2						0.924	3.00	31%
	2	West			2	2		3	1			1.164	3.00	39%
												0	3.00	0%
												0	3.00	0%
												0	3.00	0%
												0	3.00	0%

NOTES :

1. All figures are in amperes
2. All appliances are manufactured by System Sensor
3. All horn/strobe loads are calculated using high level temporal