

MS-9050UD Battery Calculation

Secondary Power Source Requirements

Device Type	Standby Current (amps)				Secondary Alarm Current (amps)					
	Qty		Current Draw	Total	Qty		Current Draw	Total		
Main Circuit Board	1	x	0.120000	=	0.120000	1	x	0.200000	=	0.200000
4XTMF	0	x	0.005000	=		0	x	0.011000	=	
ANN-SEC	0	x	0.003000	=		0	x	0.003000	=	
Conventional Detectors	0	x	0.000000	=		0	x	0.000000	=	
EOLR-1	0	x	0.020000	=		0	x	0.020000	=	
ANN-80	0	x	0.015000	=		0	x	0.040000	=	
ANN-80-W	0	x	0.015000	=		0	x	0.040000	=	
ANN-LED	0	x	0.028000	=		0	x	0.068000	=	
ANN-RLED	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	=	
ANN-LC	0	x	0.150000	=		0	x	0.150000	=	
IPDACT-2	0	x	0.093000	=		0	x	0.136000	=	
IPDACT-2UD	0	x	0.098000	=		0	x	0.155000	=	
Addressable Devices										
BEAM355	0	x	0.002000	=						
BEAM355S	0	x	0.002000	=						
BEAM1224	0	x	0.017000	=						
CP355	0	x	0.000300	=						
SD355	1	x	0.000300	=	0.000300					
SD355T	0	x	0.000300	=						
SD355R	0	x	0.000300	=						
AD355	0	x	0.000300	=						
H355	0	x	0.000300	=						
H355R	0	x	0.000300	=						
H355HT	0	x	0.000300	=						
D350P	0	x	0.000300	=						
D350RP	0	x	0.000300	=						
D350PL	0	x	0.000300	=						
D350RPL	0	x	0.000300	=						
D355PL	0	x	0.000300	=						
MMF-300	0	x	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	5	x	0.000300	=	0.001500					
CMF-300	0	x	0.000390	=						
CMF-300-6	0	x	0.002250	=						
CRF-300	0	x	0.000270	=						
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	=						
Maximum alarm draw for all Addressable devices ----->									0.40000	
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 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	=	
NAC 1			0.000000	=				0.528000	=	0.528000
NAC 2			0.000000	=				0.000000	=	
Total Standby Load						0.121800		Total Alarm Load		1.128000



Fire-Lite Alarms
by Honeywell

MS-9050UD Battery Calculation

Note 1: You are **fully responsible** for verifying these calculations.

Note 2: Use the dropdowns in the **yellow** cells to enter values.

Calculation in Total Sheet

		Required Standby Time in Hours			
		24 Hours			
Total Standby Current	0.1200 Amps	x	24	=	2.880 AH
		Required Alarm Time in Minutes			
		5 Minutes			
Total Alarm Load	1.1280 Amps	x	0.084	=	0.095 AH
Total Current Load					2.975 AH
Multiply by the Derating Factor			1.2	=	x 1.20
Total Ampere Hours Required					3.57 AH

Recommended Batteries:	BAT-1270 - 7AH Batteries
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Battery Check

The batteries can be charged by the MS-9050UD Charger.

The batteries can be housed in the MS-9050UD 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

MS-9050UD Circuit Detail

NAC 1											
Device	Qty		Non-Alarm Draw	=	Total	Qty		Alarm Draw	=	Total	
P2R @ 75 Candela	2	x	0.000000	=	0.000000	2	x	0.176000	=	0.352000	
P2RK @ 75 Candela	1	x	0.000000	=	0.000000	1	x	0.176000	=	0.176000	
	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	=		
	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					0.528000

NAC 2											
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	=		
	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