

MS-9200UDLS Rev.3 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	0.145000	= 0.145000	1	x	0.275000	= 0.275000
XRM-24B	0	x	0.000000	=	0	x	0.000000	=
4XTMF	0	x	0.005000	=	0	x	0.011000	=
IPDACT-2	0	x	0.093000	=	0	x	0.136000	=
IPDACT-2UD	0	x	0.098000	=	0	x	0.155000	=
ANN-BUS Devices								
ANN-80(-W)	1	x	0.015000	= 0.015000	1	x	0.040000	= 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-S/PG	0	x	0.045000	=	0	x	0.045000	=
ACS Annunciators								
ACM-8RF	0	x	0.030000	=	0	x	0.158000	=
ACM-16ATF	0	x	0.040000	=	0	x	0.056000	=
ACM-32AF	0	x	0.040000	=	0	x	0.056000	=
AEM-16ATF	0	x	0.002000	=	0	x	0.018000	=
AEM-32AF	0	x	0.002000	=	0	x	0.018000	=
AFM-16ATF	0	x	0.040000	=	0	x	0.056000	=
AFM-32AF	0	x	0.040000	=	0	x	0.056000	=
AFM-16AF	0	x	0.025000	=	0	x	0.065000	=
LDM-32F	0	x	0.040000	=	0	x	0.056000	=
LDM-E32F	0	x	0.002000	=	0	x	0.018000	=
LCD-80F	0	x	0.025000	=	0	x	0.064000	=
Resettable Power								
4-Wire Smoke Detectors	0	x	0.000000	=	0	x	0.000000	=
Addressable Devices								
BEAM355	0	x	0.002000	=				
BEAM355S	0	x	0.002000	=				
BEAM1224	0	x	0.017000	=				
CP355	0	x	0.000300	=				
SD355	9	x	0.000300	= 0.002700				
SD355T	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	4	x	0.000400	= 0.001600				
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	7	x	0.000300	= 0.002100				
CMF-300	0	x	0.000390	=				
CMF-300-6	0	x	0.002250	=				
CRF-300		x	0.000270	=				
CRF-300-6	0	x	0.001450	=				
I300	0	x	0.000400	=				
B501BH-2	0	x	0.001000	=				
B501BHT-2	0	x	0.001000	=				
B224RB	0	x	0.000500	=				
B224BI	0	x	0.000450	=				

B200SR	0	x	0.000500	=						
CDRM-300	4	x	0.001300	=	0.005200					
	Maximum alarm draw for all Addressable devices ----->								0.400000	
EOLR-1	0	x	0.020000	=		0	x	0.020000	=	
FCPS (Remote Sync)						0	x	0.021700	=	
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						1	x	0.225000	= 0.225000	
NAC 2						1	x	0.588000	= 0.588000	
NAC 3						1	x	0.269000	= 0.269000	
NAC 4						1	x	0.674000	= 0.674000	
Current Draw from TB3			0.000000	=				0.000000	=	
Total Standby Load					0.171600	Total Alarm Load				2.471000

MS-9200UDLS Rev.3 Battery Calculation

Calculation in Total Sheet

		Required Standby Time in Hours		
		24 Hours		
Standby Load Current	0.17160 Amps	x	24	= 4.118 AH
		Required Alarm Time in Minutes		
		5 Minutes		
Alarm Load Current (Amps)	2.47100 Amps	x	0.084	= 0.208 AH
Total Current Load			4.326 AH	
Multiply by the Derating Factor		1.2	=	x 1.20
Total Ampere Hours Required				5.19 AH

Recommended Batteries:	BAT-1270 - 7AH Batteries
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Battery Check	
The batteries can be charged by the MS-9200UDLS Charger.	
The batteries can be housed in the MS-9200UDLS 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 9200UDLS Control Panel:	
The output current is within the panel's limitations.	