

MS-9200UDLS Rev.3 Battery Calculation

Secondary Power Source Requirements

Device Type	Qty	x	Standby Current (amps)		Secondary Alarm Current (amps)		
			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 =
ECC-FFT	0	x	0.120000	=	0	x	0.230000 =
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 =
ANN-LC	0	x	0.150000	=	0	x	0.150000 =
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	1	x	0.025000	= 0.025000	1	x	0.064000 = 0.064000
Addressable Devices							
BEAM355	0	x	0.002000	=			
BEAM355S	0	x	0.002000	=			
BEAM1224	0	x	0.017000	=			
CP355	0	x	0.000300	=			
SD355	14	x	0.000300	= 0.004200			
SD355T	0	x	0.000300	=			
AD355	0	x	0.000300	=			
H355	0	x	0.000300	=			
H355R	39	x	0.000300	= 0.011700			
H355HT	12	x	0.000300	= 0.003600			
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	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	9	x	0.000300	= 0.002700			
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	=			
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	0.001000	=					
Maximum alarm draw for all Addressable devices ----->									0.400000
EOLR-1	1	x	0.020000	=	0.020000	1	x	0.020000	= 0.020000
FCPS (Remote Sync)						1	x	0.021700	= 0.021700
Resettable Power									
4-Wire Smoke Detectors	0	x	0.000000	=		0	x	0.000000	=
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	=
Miscellaneous Devices									
CO Detector	1	x	0.020000	=	0.020000	1	x	0.040000	= 0.040000
	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	=				0.900000	= 0.900000
NAC/Output #2			0.000000	=				0.990000	= 0.990000
NAC/Output #3			0.000000	=				0.000000	=
NAC/Output #4			0.000000	=				0.000000	=
Current Draw from TB3			0.000000	=				0.000000	=
Total Standby Load					0.247600	Total Alarm Load			2.750700

MS-9200UDLS Rev.3 Battery Calculation

Calculation in Total Sheet

		Required Standby Time in Hours			
		24 Hours			
Standby Load Current	0.24760 Amps	x	24	=	5.942 AH
		Required Alarm Time in Minutes			
		15 Minutes			
Alarm Load Current (Amps)	2.75070 Amps	x	0.25	=	0.688 AH
Total Current Load					6.630 AH
Multiply by the Derating Factor			1.2	=	x 1.20
Total Ampere Hours Required					7.96 AH

Recommended Batteries:	BAT-12120 - 12AH 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.	