

## MS-9600UDLS 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	0.10300	=	0.10300	1	x	0.25300	=	0.25300
DACT-UD2	1	x	0.01700	=	0.01700	1	x	0.02900	=	0.02900
SLC-2LS	0	x	0.01900	=		0	x	0.02600	=	
4XTMF	1	x	0.00500	=	0.00500	1	x	0.01100	=	0.01100
IPDACT-2	0	x	0.09300	=		0	x	0.13600	=	
IPDACT-2UD	0	x	0.09800	=		0	x	0.15500	=	
<b>ANN-BUS Devices</b>										
ANN-80	1	x	0.01500	=	0.015000	1	x	0.04000	=	0.040000
ANN-80-W	0	x	0.01500	=		0	x	0.04000	=	
ANN-LED	0	x	0.02800	=		0	x	0.06800	=	
ANN-RLED	0	x	0.02800	=		0	x	0.06800	=	
ANN-RLY	0	x	0.01500	=		0	x	0.07500	=	
ANN-I/O	0	x	0.03500	=		0	x	0.20000	=	
ANN-I/O LED	0	x	0.00000	=		0	x	0.01000	=	
ANN-S/PG	0	x	0.04500	=		0	x	0.04500	=	
<b>ACS Annunciators</b>										
ACM-8RF	0	x	0.03000	=		0	x	0.15800	=	
ACM-16ATF	0	x	0.04000	=		0	x	0.05600	=	
AEM-16ATF	0	x	0.00200	=		0	x	0.01800	=	
AFM-16ATF	0	x	0.04000	=		0	x	0.05600	=	
ACM-32AF	0	x	0.04000	=		0	x	0.05600	=	
AEM-32AF	0	x	0.00200	=		0	x	0.01800	=	
AFM-32AF	0	x	0.04000	=		0	x	0.05600	=	
AFM-16AF	0	x	0.02500	=		0	x	0.06500	=	
DACT-UD	0	x	0.04000	=		0	x	0.07500	=	
LDM-32F	0	x	0.04000	=		0	x	0.05600	=	
LDM-E32F	0	x	0.00200	=		0	x	0.01800	=	
LCD-80F	0	x	0.02500	=		0	x	0.06400	=	
Conventional Detectors	0	x	0.00000	=		0	x	0.00000	=	
EOLR-1	0	x	0.02000	=		0	x	0.02000	=	
<b>Addressable Devices</b>										
BEAM355	0	x	0.00200	=						
BEAM355S	0	x	0.00200	=						
BEAM1224	0	x	0.01700	=						
CP355	0	x	0.00030	=						
SD355	0	x	0.00030	=						
SD355T	0	x	0.00030	=						
SD355R	0	x	0.00030	=						
AD355	9	x	0.00030	=	0.002700					
H355	5	x	0.00030	=	0.00150					
H355R	0	x	0.00030	=						
H355HT	0	x	0.00030	=						
D350P	0	x	0.00030	=						
D350RP	0	x	0.00030	=						
D350PL	0	x	0.00030	=						
D350RPL	0	x	0.00030	=						
D355PL	3	x	0.00030	=	0.00090					
MMF-300	0	x	0.00040	=						
MMF-300-10	0	x	0.00350	=						
MDF-300	0	x	0.00075	=						
MMF-301	5	x	0.00038	=	0.00188					

MMF-302	2	x	0.00027	=	0.00054						
MMF-302-6	0	x	0.00200	=							
BG-12LX	5	x	0.00030	=	0.00150						
CMF-300	0	x	0.00039	=							
CMF-300-6	0	x	0.00225	=							
CRF-300	6	x	0.00027	=	0.00162						
CRF-300-6	0	x	0.00145	=							
CDRM-300	0	x	0.00130	=							
I300	0	x	0.00040	=							
ISO-6	0	x	0.00270	=							
B501BH-2	0	x	0.00100	=							
B501BHT-2	0	x	0.00100	=							
B224RB	0	x	0.00050	=							
B224BI	0	x	0.00045	=							
W-GATE	0	x	0.02400	=							
Maximum alarm draw for SLC 1 ----->							0.40000				
Maximum alarm draw for SLC 2							0	x	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)	2	x	0.012000	=	0.024000	2	x	0.090000	=	0.180000	
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	=		
RTS151KEY	3	x	0.000000	=	0.000000	3	x	0.000000	=	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	=				0.176000	=	0.176000	
NAC 2			0.000000	=				0.000000	=		
NAC 3			0.000000	=				0.000000	=		
NAC 4			0.000000	=				0.000000	=		
Resettable 1			0.000000	=				0.000000	=		
Non-Resettable 1			0.000000	=				0.000000	=		
Non-Resettable 2			0.000000	=				0.000000	=		
Sum each column for totals	<b>Total Standby Current</b>			<b>0.17464</b>	<b>Total Alarm Current</b>			<b>1.08900</b>			

## MS-9600UDLS Battery Calculation

Note: You are fully responsible for verifying these calculations. Use the dropdowns in the yellow cells to enter in values.

		<b>Required Standby Time in Hours</b>		
		24 Hours		
<b>Standby Load Current (Amps)</b>	0.1746 Amps	x	24	= 4.191 AH
		<b>Required Alarm Time in Hours</b>		
		5 Minutes		
<b>Alarm Load Current (Amps)</b>	1.0890 Amps	x	0.084	= 0.091 AH
<b>Total Current Load</b>				4.283 AH
Multiply by the Derating Factor			1.2	= x 1.20
<b>Total Ampere Hours Required</b>				<b>5.14 AH</b>

<b>Recommended Batteries:</b>	<b>BAT-12120 - 12AH Batteries</b>
-------------------------------	-----------------------------------

<b>Battery Check</b>	
The batteries can be charged by the MS-9600UDLS Charger.	
The batteries can be housed in the MS-9600UDLS Cabinet.	

<b>Current Draw Check</b>	
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.	
The standby current is within the limitations of the panel.	
The alarm current is within output limitations of the panel.	



NAC 4											
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	=		
<b>Total Standby Load</b>					<b>0.000000</b>	<b>Total Alarm Load</b>					<b>0.000000</b>