

MS-10UD-7 Battery Calculations

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.

Device Type	Primary Non-Alarm (Amps)			Primary Alarm (Amps)			Secondary Non-Alarm (Amps)					
	Qty	x	Current Draw	Total	Qty	x	Current Draw	Total	Qty	x	Current Draw	Total
1. System												
Main Circuit Board	1	x	0.08500	0.08500	1	x	0.17500	0.17500	1	x	0.08500	0.08500
ANN-LED	0	x	0.02800		0	x	0.06800		0	x	0.02800	
4XTMF	0	x	0.00500		0	x	0.01100		0	x	0.00500	
CAC-5X	0	x	0.00100		0	x	0.00100		0	x	0.00100	
2. Annunciators												
ANN-80	0	x	0.03700		0	x	0.04000		0	x	0.01500	
ANN-I/O	0	x	0.03500		0	x	0.20000		0	x	0.03500	
ANN-I/O LEDs	0	x	0.00000		0	x	0.01000		0	x	0.00000	
ANN-S/PG	0	x	0.04500		0	x	0.04500		0	x	0.04500	
3. Resettable Power												
2-wire Detector Heads	0	x	0.00000		0	x	0.00000		0	x	0.00000	
4-Wire Detector Heads	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Power SuperVision Relays	0	x	0.02500		0	x	0.02500		0	x	0.02500	
4. Notification Appliances												
NAC #1				0	x	0.00000						
NAC #2				0	x	0.00000						
NAC #3				0	x	0.00000						
NAC #4				0	x	0.00000						
TB9 (Non)Resettable (Term 1+2)	0	x	0.00000		0	x	0.00000		0	x	0.00000	
TB9 Resettable (Term 3+4)	0	x	0.00000		0	x	0.00000		0	x	0.00000	
Sum each column for totals	Total Current			0.08500	Total Current			0.17500	Total Current			0.08500

MS-10UD-7 Secondary Battery Calculations

Note: You can edit all current draws and are **fully responsible for verifying** these calculations. Only enter values in **yellow** cells.

Secondary Non-Alarm Load (Amps)	0.085 A	x	Required Standby Time	24 Hours	=	2.04 AH
			Required Alarm Time	5 Minutes		
Secondary Alarm Load (Amps)	0.175 A	x		0.084	=	0.01 AH
Standby and Alarm Load Subtotal						2.05 AH
Derating Factor						x 1.2
Total Ampere Hours Required						2.47 AH

Battery Check

The batteries can be housed in the MS-10UD-7 cabinet
 An external battery charger is not required for this system

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.
 TB9 (Non)Resettable Power (Terminals 1+2) is within the limitations of the circuit.
 TB9 Resettable Power (Terminals 3+4) 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.