

Battery Calculations for Panel: FACP						
Part No:AFC-1000V - AFC-1000V FACP						
Part No.	Qty.	Description	Standby	Total Standby	Alarm	Total Alarm
AFC-1000_MB	1	AFC-1000 MAIN BOARD	130.0000mA	130.0000mA	200.0000mA	200.0000mA
VM-1000	1	VM-1000 AUDIO RISER CARD	0.0000mA	0.0000mA	0.0000mA	0.0000mA
		Total Panel Stby	130.0000mA	130.0000mA	200.0000mA	200.0000mA
Peripheral Devices						
EOL-5.1	6	Potter, EOL, 5.1K Ohms (Notification)	0.0000mA	0.0000mA	0.0000mA	0.0000mA
ELSTW	9	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE (Notification) 15CD	0.0000mA	0.0000mA	22.0000mA	198.0000mA
ELSPSTWC	8	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING (Notification) 110CD	0.0000mA	0.0000mA	86.0000mA	688.0000mA
ELSPSTWC	9	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING (Notification) 30CD	0.0000mA	0.0000mA	30.0000mA	270.0000mA
ELSTWC	2	ELUXA MULTI-CANDELA STROBE WHITE, CEILING, FIRE (Notification) 15CD	0.0000mA	0.0000mA	22.0000mA	44.0000mA
ELSPSTWC	1	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING (Notification) 75CD	0.0000mA	0.0000mA	60.0000mA	60.0000mA
ELSPSTWC	1	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING (Notification) 15CD	0.0000mA	0.0000mA	22.0000mA	22.0000mA
ELSPSTW	2	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, WALL (Notification) 75CD	0.0000mA	0.0000mA	60.0000mA	120.0000mA
PDC-10-24	1	10 INCH 24VDC 80DB BELL (Notification) 80dB	0.0000mA	0.0000mA	20.0000mA	20.0000mA
EL4XST - FR	1	EL4XST - FR, Strobe, Red, "FIRE" (Notification) 110CD	0.0000mA	0.0000mA	97.0000mA	97.0000mA
PAD300-SB	16	PAD300-SB ADDRESSABLE SOUNDER BASE (Notification) 85dB	4.0000mA	64.0000mA	40.0000mA	640.0000mA
D4120W	1	WEATHERTIGHT 4 WIRE PHOTO DUCT DETECTOR (Power)	0.0210mA	0.0210mA	0.0650mA	0.0650mA
PAD100-PSSA	1	PAD100-PSSA, Addressable Pull Station, Single Action (Signaling line)	0.2000mA	0.2000mA	0.2000mA	0.2000mA
PAD100-DIM	4	PAD100-DIM, Multi-Input Module, One SLC Loop, Two Class B or One Class A (Signaling line)	0.2400mA	0.9600mA	0.2400mA	0.9600mA
PAD300-PCD	16	PHOTOELECTRIC SMOKE/CARBON MONOXIDE SENSOR (Signaling line)	1.4000mA	22.4000mA	0.3000mA	4.8000mA
PAD300-SB	16	PAD300-SB ADDRESSABLE SOUNDER BASE (Signaling line)	0.2000mA	3.2000mA	0.2000mA	3.2000mA
PAD300-PD	16	PHOTOELECTRIC SMOKE DETECTOR (Signaling line)	0.3000mA	4.8000mA	0.3000mA	4.8000mA
PAD300-HD	13	FIXED TEMP AND/OR SELECTABLE ROR HEAT SENSOR (Signaling line)	0.3000mA	3.9000mA	0.3000mA	3.9000mA
D4120W	2	WEATHERTIGHT 4 WIRE PHOTO DUCT DETECTOR (Initiating)	0.0210mA	0.0420mA	0.0000mA	0.0000mA
LOC-1000	1	LOCAL OPERATOR CONSOLE, LOC-1000_MB (Audio)	0.0000mA	0.0000mA	0.0000mA	0.0000mA
LOC-1000	1	LOCAL OPERATOR CONSOLE, LOC-1000_MB (Serial)	0.0000mA	0.0000mA	0.0000mA	0.0000mA
SCA-2570	1	SINGLE CHANNEL 25W, 25V OR 70V AMPLIFIER, SCA-2570_MB (Serial)	58.0000mA	58.0000mA	608.0000mA	608.0000mA
		Total Peripheral Stby	157.5230mA	Total Periph Alarm	2784.9250mA	
		Total Standby Amps	287.5230mA	Total Alarm Amps	2984.9250mA	
Standby time: 24 Hrs 6.901Ah						
Alarm time: 5 Min 0.249Ah						
Battery requirement: 7.149Ah						
Requirement with compensation: 8.937Ah						
Compensation Factors - Standby:1.25 Alarm:1.25						

Battery Calculations for Panel: P2						
Part No:LOC-1000 - LOCAL OPERATOR CONSOLE						
Part No.	Qty.	Description	Standby	Total Standby	Alarm	Total Alarm
LOC-1000_MB	1	LOC-1000_MB	77.0000mA	77.0000mA	107.0000mA	107.0000mA
		Total Panel Stby	77.0000mA	Total Panel Alarm	107.0000mA	
Peripheral Devices						
		Total Peripheral Stby	0.0000mA	Total Periph Alarm	0.0000mA	
		Total Standby Amps	77.0000mA	Total Alarm Amps	107.0000mA	
Standby time: 24 Hrs 1.848Ah						
Alarm time: 5 Min 0.009Ah						
Battery requirement: 1.857Ah						
Requirement with compensation: 2.321Ah						
Compensation Factors - Standby:1.25 Alarm:1.25						

Battery Calculations for Panel: AMP						
Part No:SCA-2570 - SINGLE CHANNEL 25W, 25V OR 70V AMPLIFIER						
Part No.	Qty.	Description	Standby	Total Standby	Alarm	Total Alarm
SCA-2570_MB	1	SCA-2570 MAIN BOARD	0.0000mA	0.0000mA	0.0000mA	0.0000mA
		Total Panel Stby	0.0000mA	Total Panel Alarm	0.0000mA	
Peripheral Devices						
EOL-5.1	4	Potter, EOL, 5.1K Ohms (Notification)	0.0000mA	0.0000mA	0.0000mA	0.0000mA
ELSPSTWC	18	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING (Notification) 82dB 0.5 Watts	0.0000mA	0.0000mA	0.0000mA	0.0000mA
ELSPSTWC	1	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING (Notification) 79dB 0.25 Watts	0.0000mA	0.0000mA	0.0000mA	0.0000mA
ELSPSTW	2	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, WALL (Notification) 85dB 1 Watts	0.0000mA	0.0000mA	0.0000mA	0.0000mA
		Total Peripheral Stby	0.0000mA	Total Periph Alarm	0.0000mA	
		Total Standby Amps	0.0000mA	Total Alarm Amps	0.0000mA	
Standby time: 24 Hrs 0Ah						
Alarm time: 5 Min 0Ah						
Battery requirement: 0Ah						
Requirement with compensation: 0Ah						
Compensation Factors - Standby:1.25 Alarm:1.25						

Battery Calculations for Transponder: AES						
Part No:7707P-88-ULP-M - INTELLINET 2.0 FIRE SUBSCRIBER 8 ZONE, 7794A, LOCAL ANNUN, MCT, RED						
Part No.	Qty.	Description	Standby	Total Standby	Alarm	Total Alarm
7707P-88-ULP-M_MB	1	MOTHER BOARD	0.0000mA	0.0000mA	0.0000mA	0.0000mA
7795	1	7795, Panel Component, AES-Intellipro Fire Full Data Module	350.0000mA	350.0000mA	350.0000mA	350.0000mA
		Total Panel Stby	350.0000mA	Total Panel Alarm	350.0000mA	
Peripheral Devices						
		Total Peripheral Stby	0.0000mA	Total Periph Alarm	0.0000mA	
		Total Standby Amps	350.0000mA	Total Alarm Amps	350.0000mA	
Standby time: 24 Hrs 8.4Ah						
Alarm time: 5 Min 0.029Ah						
Battery requirement: 8.429Ah						
Requirement with compensation: 10.536Ah						
Compensation Factors - Standby:1.25 Alarm:1.25						

Circuit Calculations Panel: FACP Card: 00 Circuit:AUX1						
Circuit Name: AUX1						
Circuit Type: Power Terminal Voltage: 20.4VDC Amperage: 2.0000A						
Cable: 14/2 SOL JKT FPLR 1M RL RED #14						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 18%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
	AFC-1000V	Panel			20.4V	
1	D4120W	WEATHERTIGHT 4 WIRE PHOTO DUCT DETECTOR	54'-1	0.0650mA	20.4V	(0V)
			54'-1	0.0650mA		
Total Current: 0.0650mA						
(Total VDrop Percent:0.00%) Total Voltage Drop : 0V						

Circuit Calculations Panel: FACP Card: 01 Circuit:ARS1						
Design Criteria: Ambient temperature: 167°F Maximum dB Drop: 3 dB						
Circuit	Description	Type	Total Len	LOC-1000	Total Watts	Gauge
ARS1	Audio/Riser		0'-0	1	0.00 Watts	#16
Max Allowable Len 0'						
Circuit Calculations Panel: FACP Card: 01 Circuit:SBC4						
Circuit Name: SBC4						
Circuit Type: Serial/RS-485 P-Link Terminal Voltage: 16V:DC Amperage: 1.0000A						
Cable: 16/2 SOL JKT FPLR 1000'BX RED #16						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 18%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
	AFC-1000V	Panel				
1	LOC-1000	LOCAL OPERATOR CONSOLE	202'-9	0.0000mA		

Circuit Calculations Panel: FACP Card: 00 Circuit:SIG1						
Circuit Name: SIG1						
Circuit Type: Notification Terminal Voltage: 24V:DC Amperage: 3.0000A						
Cable: 14/2 SOL JKT FPLR 1M RL RED #14						
Calculations based on Running Total Length.						
Design Criteria: Ambient temperature: 167°F Max. operating voltage drop: 18%						
Device	Part No	Appliance Desc	Distance	Current	Voltage	Voltage Drop
	AFC-1000V	Panel			24V	
1	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD	30'-9	22.0000mA	23.9182V	(0.0818V)
2	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD	10'-5	86.0000mA	23.8923V	(0.0259V)
3	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 30CD	37'-10	30.0000mA	23.816V	(0.0763V)
4	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD	21'-11	22.0000mA	23.7765V	(0.0395V)
5	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 30CD	21'-6	30.0000mA	23.7399V	(0.0366V)
6	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD	24'-11	86.0000mA	23.7025V	(0.0374V)
7	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 30CD	29'-6	30.0000mA	23.6726V	(0.0299V)
8	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD	22'-4	22.0000mA	23.6539V	(0.0186V)
9	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 30CD	22'-1	30.0000mA	23.6382V	(0.0157V)
10	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD	18'-7	86.0000mA	23.6287V	(0.0095V)
	EOL-5.1	Potter, EOL, 5.1K Ohms	1'-1	0.0000mA	23.6287V	(0V)
			241'-2	444.0000mA		
Total Current: 444.0000mA						
(Total VDrop Percent:1.55%) Total Voltage Drop : 0.3713V						

Circuit Calculations							Panel: FACP Card: 00 Circuit:SIG2	
Circuit Name: SIG2								
Circuit Type: Notification							Terminal Voltage: 24V:DC	
							Amperage: 3.0000A	
Cable: 14/2 SOL JKT FPLR 1M RL RED #14								
Calculations based on Running Total Length.								
Design Criteria: Ambient temperature: 167°F							Max. operating voltage drop: 18%	
Device	Part No	Appliance Desc			Distance	Current	Voltage	Voltage Drop
	AFC-1000V	Panel					24V	
1	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD			53'-5	22.0000mA	23.8353V	(0.1647V)
2	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD			38'-4	86.0000mA	23.7224V	(0.1129V)
3	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD			40'-8	86.0000mA	23.6247V	(0.0977V)
4	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD			21'-4	86.0000mA	23.5844V	(0.0402V)
5	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 110CD			38'-5	86.0000mA	23.5317V	(0.0527V)
6	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD			100'-11	22.0000mA	23.4457V	(0.0896V)
7	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD			35'-0	22.0000mA	23.4211V	(0.0246V)
8	ELSTW	ELUXA MULTI-CANDELA STROBE WHITE, WALL, FIRE, 15CD			14'-11	22.0000mA	23.4129V	(0.0083V)
9	ELSPSTWC	ELUXA HIGH FIDELITY SPEAKER STROBE, WHITE, FIRE, CEILING, 30CD			11'-11	30.0000mA	23.4079V	(0.005V)
10	ELSTWC	ELUXA MULTI-CANDELA STROBE WHITE, CEILING, FIRE, 15CD			17'-5	22.0000mA	23.4033V	(0.0046V)
11	ELSTWC	ELUXA MULTI-CANDELA STROBE WHITE, CEILING, FIRE, 15CD			13'-8	22.0000mA	23.4015V	(0.0019V)
	EOL-5.1	Potter, EOL, 5.1K Ohms			1'-7	0.0000mA	23.4015V	(0V)
					387'-9	506.0000mA		
Total Current: 506.0000mA								
(Total VDrop Percent:2.49%)							Total Voltage Drop : 0.5985V	