



SILENT KNIGHT

5700 Calculations
Version 02.24.09

Global Project Values:

Project Name:
Project ID:
Prepared By:
Date:

Standby Hours:
Alarm Mins:
Derating Factor:
Voltage Drop Warning
Threshold %:

Panel ID:
Location:

Model: 5700 Add. Fire Alarm Control Panel
Volts: 24 VDC

Max NAC Current: 2.5 Amps
Max Panel Current: 2.5 Amps

| Ckt.# | Circuit Name | Qty | Current Draw | | Wire AWG & Type | Ohms Per 1000 Ft. | Length(ft) One-Way | Actual Ohms | Volts @ EOL | %Drop |
|-----------------------------------|---------------------------|-----|--------------|-------|-------------------------------------|----------------------|-----------------------|----------------|----------------|-------|
| | | | Standby | Alarm | | | | | | |
| 5700 | 5700 CTRL Panel | 1 | 0.200 | 0.325 | | | | | | |
| SD500-AIM | Addr. Input Mod | | 0.000 | 0.000 | | | | | | |
| SD500-MIM | Mini-Input Module | 10 | 0.006 | 0.006 | | | | | | |
| SD500-ARM | Addr. Relay Module | | 0.000 | 0.000 | | | | | | |
| SD500-PS | Addr. Pull Station | 11 | 0.006 | 0.006 | | | | | | |
| SD505-AIS | Addr. Ion Smoke Det | | 0.000 | 0.000 | | | | | | |
| SD505-AHS | Addr. Heat Detector | | 0.000 | 0.000 | | | | | | |
| SD505-APS | Addr. Photo Smoke Det | 4 | 0.002 | 0.002 | | | | | | |
| SD505-DUCTR | Addr. Duct w/Relay | | 0.000 | 0.000 | | | | | | |
| SD505-DUCT | Addr. Duct | | 0.000 | 0.000 | | | | | | |
| SD500-ANM | Addr. Notification Module | | 0.000 | 0.000 | | | | | | |
| SD500-LED | Addr. LED Module | | 0.000 | 0.000 | | | | | | |
| SD500-SDM | Addr. Smoke Det. Mod. | | 0.000 | 0.000 | | | | | | |
| SD505-6RB | Addr. Det. Relay Base | | 0.000 | 0.000 | | | | | | |
| SD505-6SB | Addr. Det. Sounder Base | | 0.000 | 0.000 | | | | | | |
| SD505-6IB | Addr. Det. Isolator Base | | 0.000 | 0.000 | | | | | | |
| SD500-LIM | Line Isolation Module | | 0.000 | 0.000 | | | | | | |
| 5860 | LCD Remote Annunc | | 0.000 | 0.000 | | | | | | |
| 5824 | Serial/Parallel Module | | 0.000 | 0.000 | | | | | | |
| 5496 | Power Expander | | 0.000 | 0.000 | | | | | | |
| 5895XL | Power Expander | 1 | 0.010 | 0.010 | | | | | | |
| 5865-4 | LED Annunciator (4G) | | 0.000 | 0.000 | | | | | | |
| 5865-3 | LED Annunciator (3G) | | 0.000 | 0.000 | | | | | | |
| 5880 | LED Driver Module | | 0.000 | 0.000 | | | | | | |
| 5883 | Relay Module | | 0.000 | 0.000 | | | | | | |
| NAC #1 | Notification Appl Circuit | | 0.000 | 0.939 | #14 Solid | 2.52 | 250 | 1.26 | 19.22 | 5.80% |
| NAC #2 | Notification Appl Circuit | | 0.000 | 1.203 | #14 Solid | 2.52 | 250 | 1.26 | 18.88 | 7.43% |
| Total Standby Current (Amps) | | | 0.224 | 2.491 | Total Alarm Current (Amps) | | | | | |
| Standby Time In Hours | | | 24 | 0.083 | Alarm Time In Minutes / 60 (5 Mins) | | | | | |
| Total Standby AH Required | | | 5.370 | 0.208 | Total Alarm AH Required | | | | | |
| Total Combined AH Required | | | 5.58 | | Command Shortcuts | | | | | |
| Multiply By The Derating Factor | | | 1.20 | | Configure Circuits | | Print Page | | | |
| Minimum Battery AmpHours Required | | | 6.69 | | | | | | | |



**SILENT
KNIGHT**

5895XL Calculations
Version 02.23.09

Global Project Values:

Project Name:
Project ID:
Prepared By:
Date:

Standby Hours:
Alarm Mins:
Derating Factor:
Voltage Drop Warning
Threshold %:

Panel ID:
Location:

Model: 5895XL Power Expander
Volts: 24 VDC

Max NAC Current: 3.0 Amps
Max Panel Current: 6.0 Amps

| Part.# | Description | Qty | Current Draw | | Wire AWG & Type | Ohms Per 1000 Ft. | Length(ft) One-Way | Actual Ohms | Volts @ EOL | %Drop |
|-----------------------------------|---------------------------|-----|--------------|-------|-------------------------------------|----------------------|-----------------------|----------------|----------------|-------|
| | | | Standby | Alarm | | | | | | |
| 5895XL | 5895XL Pwr Module | 1 | 0.040 | 0.160 | | | | | | |
| SD500-AIM | Addr. Input Mod | | 0.000 | 0.000 | | | | | | |
| SD500-MIM | Mini-Input Module | | 0.000 | 0.000 | | | | | | |
| SD500-ARM | Addr. Relay Module | | 0.000 | 0.000 | | | | | | |
| SD500-PS | Addr. Pull Station | | 0.000 | 0.000 | | | | | | |
| SD505-AIS | Addr. Ion Smoke Det | | 0.000 | 0.000 | | | | | | |
| SD505-AHS | Addr. Heat Detector | | 0.000 | 0.000 | | | | | | |
| SD505-APS | Addr. Photo Smoke Det | | 0.000 | 0.000 | | | | | | |
| SD505-DUCTR | Addr. Duct w/Relay | | 0.000 | 0.000 | | | | | | |
| SD505-DUCT | Addr. Duct | | 0.000 | 0.000 | | | | | | |
| SD500-ANM | Addr. Notification Module | | 0.000 | 0.000 | | | | | | |
| SD500-LED | Addr. LED Module | | 0.000 | 0.000 | | | | | | |
| SD500-SDM | Addr. Smoke Det. Mod. | | 0.000 | 0.000 | | | | | | |
| SD505-6RB | Addr. Det. Relay Base | | 0.000 | 0.000 | | | | | | |
| SD505-6SB | Addr. Det. Sounder Base | | 0.000 | 0.000 | | | | | | |
| SD505-6IB | Addr. Det. Isolator Base | | 0.000 | 0.000 | | | | | | |
| SD500-LIM | Line Isolation Module | | 0.000 | 0.000 | | | | | | |
| 5815XL | SLC Expander | | 0.000 | 0.000 | | | | | | |
| 5860 | LCD Remote Annunc | | 0.000 | 0.000 | | | | | | |
| 5824 | Serial/Parallel Module | | 0.000 | 0.000 | | | | | | |
| 5496 | Power Expander | | 0.000 | 0.000 | | | | | | |
| 5895XL | Power Expander | | 0.000 | 0.000 | | | | | | |
| 5865-4 | LED Annunciator (4G) | | 0.000 | 0.000 | | | | | | |
| 5865-3 | LED Annunciator (3G) | | 0.000 | 0.000 | | | | | | |
| 5880 | LED Driver Module | | 0.000 | 0.000 | | | | | | |
| 5883 | Relay Module | | 0.000 | 0.000 | | | | | | |
| PGM-I/O #1 | Notification Appl Circuit | | 0.000 | 1.192 | #12 Solid | 1.59 | 250 | 0.80 | 19.45 | 4.65% |
| PGM-I/O #2 | Notification Appl Circuit | | 0.000 | 1.199 | #12 Solid | 1.59 | 250 | 0.80 | 19.45 | 4.67% |
| PGM-I/O #3 | Notification Appl Circuit | | 0.000 | 1.666 | #12 Solid | 1.59 | 200 | 0.64 | 19.34 | 5.19% |
| PGM-I/O #4 | Notification Appl Circuit | | 0.000 | 1.559 | #12 Solid | 1.59 | 200 | 0.64 | 19.41 | 4.86% |
| PGM-I/O #5 | Notification Appl Circuit | | 0.000 | 0.000 | #12 Solid | 1.59 | | 0.00 | 20.40 | 0.00% |
| PGM-I/O #6 | Notification Appl Circuit | | 0.000 | 0.000 | #12 Solid | 1.59 | | 0.00 | 20.40 | 0.00% |
| Total Standby Current (Amps) | | | 0.040 | 5.776 | Total Alarm Current (Amps) | | | | | |
| Standby Time In Hours | | | 24 | 0.083 | Alarm Time In Minutes / 60 (5 Mins) | | | | | |
| Total Standby AH Required | | | 0.960 | 0.481 | Total Alarm AH Required | | | | | |
| Total Combined AH Required | | | 1.44 | | Command Shortcuts | | | | | |
| Multiply By The Derating Factor | | | 1.20 | | Configure Circuits | | | | | |
| Minimum Battery AmpHours Required | | | 1.73 | | Print Page | | | | | |