Product Overview

The IntelliKnight 5820XL is an intelligent addressable fire alarm control panel designed for flexibility and reliability. With support for a wide variety of detectors, modules, and accessory devices, the 5820XL is configurable for a variety of installations.

The 5820XL has one built-in signaling line circuit (SLC) to which all detectors and modules are connected. Add up to three additional SLCs with the 5815XL signaling line circuit expanders. Six onboard Flexput™ circuits are individually configurable for auxiliary power, notification outputs, or conventional smoke detectors. The 5820XL also has a built-in dual-line digital fire communicator, a Form C trouble relay, and two programmable Form C general purpose relays.
Selling Strategies

Target Customers
• Medium to large size customers
• Customers involved in:
  - New construction
  - Retrofitting existing construction - that is, replacing older or outmoded fire alarm systems in existing buildings
• Customers in vertical markets such as the healthcare, education, manufacturing, financial and other similar facilities

Typical Customer Profiles
• Customers with large campus operations
• Customers requiring a cost effective solution to retrofit their facility with a new fire alarm system
• Customers who require effective monitoring and maintenance tools for ongoing customer support

Qualifying Questions
1. Are you considering a conventional fire system for your new installation?
   The advanced capabilities of the 5820XL will increase the effectiveness of your alarm system. With pinpoint addressable capabilities and advanced maintenance capabilities, the 5820XL FACP can actually reduce the total installed cost and reduce the long-term operating expenses associated with the system. Additionally, it is expandable for future upgrades.

2. Are you considering replacing an older conventional or addressable system?
   The 5820XL does not require special wire or installation strategies and can often be installed using existing fire system wiring within the building. This flexibility can be a big savings when installing a retrofit fire system.

3. Do you want the ability to expand your fire alarm system in a cost-effective way?
   The 5820XL is ideal for growing businesses. If your facility grows, and your SLC is at maximum capacity, add up to three 5815XLs. Add the 5895XL intelligent power supply to provide additional power, connectivity for additional SLCs, or additional accessories.
Selling Points

• Analog addressable architecture enhances reliability, pinpoints problem area, and reduces false alarms
  With features like individual point identification, drift compensation, and maintenance alert this system is designed to help reduce the number of false alarms and service calls that can be so frustrating and costly.

• Designed for expandability and flexibility
  Comes with a full range of detectors, modules, and power supplies to meet installation needs. SLC expanders give you the ability to accommodate a growing business while avoiding the hassle and expense of getting a new system.

• Critical system programming and event information can be stored and updated remotely by the installation company
  The 5660 Silent Knight Software Suite (SKSS) allows your installation company to connect to the 5820XL from their offices or at your location, which means they can efficiently maintain and troubleshoot the fire system.

• Easy to install
  The JumpStart® feature scans all SLC loops and SBUS circuits, determines device type, adds the device to FACP memory, and automatically selects some system options based on device type. This saves the installer from having to program options for each device. When it comes to wiring the system, the Silent Knight SLC loop does not require special wire such as shielded wire or twisted pair, making retrofits a breeze. Because detectors and modules each have a unique address, troubleshooting is a snap.
# Features & Benefits

<table>
<thead>
<tr>
<th>Built-in support for 127 devices, expandable to 508 devices</th>
<th>Support the minimum or expand to the maximum number of devices or add devices in the future.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses standard wire. Shielded or twisted pair is not required</td>
<td>Using standard wire for new installations can reduce installation time and costs over shielded or twisted pair. For retrofit installations, existing wire runs can be used, eliminating the expense of running new wire.</td>
</tr>
<tr>
<td>Upload and download programming information, event history, and detector status onsite or from a remote location using SKSS software</td>
<td>To easily service and maintain the 5820XL system, your facility manager can view and save event history to identify any system problems using 5670 SKSS. Your installer can program or view event history and detector status using 5660 SKSS.</td>
</tr>
<tr>
<td>Configure Flexput I/O circuits as auxiliary, notification outputs, or conventional smoke detector inputs</td>
<td>Patented Flexput circuits let you retrofit an existing conventional installation, without additional hardware, so existing detectors do not have to be replaced. As well, expand system functionality by adding new devices that fully are compatible with the 5820XL.</td>
</tr>
<tr>
<td>JumpStart autoprogramming adds all devices connected to the system automatically.</td>
<td>Run when installation is complete to quickly add all detectors and modules to the system. Saves installation time.</td>
</tr>
<tr>
<td>Nonvolatile event history stores up to 1,000 events</td>
<td>Your installer can view event history to assist in troubleshooting and system maintenance.</td>
</tr>
</tbody>
</table>
Figure 1: 5820XL Configuration Example

6820XL Addressable Fire Alarm Control Panel

3 Form C Relays
6 Flexput I/O Circuits: Configure as Inputs or Outputs
S-Bus (31 Modules/System)

5860 Remote Annunciator

Onboard SLC Loop – 127 Devices/SLC Loop
- Photoelectric Smoke Detector
- Ion Detector
- Heat Detector

SLC Loop 2 with Optional 5815XL

5815XL SLC Expander

S-LC Loop 2 – 127 Devices/SLC Loop (Requires 5815XL)
- Sounder Base
- Relay Base
- Isolator Base

5660 SKSS Upload/Download Software or 5670 SKSS Facility Management Software

9800 12-Line Central Station Receiver or 9500 2-Line Central Station Receiver
Ordering Information

The range of SLC devices, SBUS accessories, and miscellaneous accessories compatible with the 5820XL are described briefly in this section.

SLC Detectors & Modules

Detectors and modules connect to the signaling line circuit (SLC) loop on the FACP or 5895XL. All these devices are SLC devices.

SD505-APS—Photoelectric smoke detector.

SD505-AHS—Fixed temperature heat detector.

SD505-AIS—Ionization smoke detector.

SD505-ADH—Duct detector housing for use with SD505-APS or SD505-AIS to detect smoke and combustion products in HVAC ducts.

SD505-ADHR—Duct detector house for use with SD505-APS or SD505-AIS to detect smoke and combustion products in HVAC ducts.

SD500-AIM—Dry contact input module provides an interface to contact devices.

SD500-MIM—A compact input monitor module that provides an interface to contact devices.

SD500-ARM—Relay module with two Form C relay contacts.

SD500-ANM—Notification module.

SD500-SDM—Two-wire interface module.

SD500-LIM—Line isolator module.

SD500-LED—LED driver module for up to 80 LEDs.

SD500-PS—Single action pull station.

SD500-PSDA—Dual action pull station.

SD505-6AB—6” mounting base for use with SD505-APS, SD505-AHS, SD505-AIS.

SD505-4AB—4” mounting base for use with SD505-APS, SD505-AHS, SD505-AIS.
Ordering Information (cont.)

SD505-6SB—6” mounting base with built-in sounder.

SD505-6RB—6” mounting base with one built-in Form C relay contact.

SD505-6IB—6” mount base with built-in isolator for use with SD505-APS, SD505-AHS, and SD505-AIS.

SD505-DTS—Remote test switch for use with the SD505-ADHR.

SBUS Accessories

SBUS accessories connect to the 5820XL SBUS on the FACP or an intelligent power module.

5860—Remote annunciator with four-line, 20 character per line LCD display.

5815XL—Signaling line circuit expander used to add another SLC loop to the system.

5895XL—Six amp intelligent power supply that adds six Flexput I/O circuits and two Form C relays to the system.

5496—Six amp intelligent power supply that provides four notification appliance circuit outputs.

5824—A serial/parallel interface module used to connect a printer to the system.

5880—LED I/O module provides 40 programmable LED outputs and eight supervised dry contact inputs.

5865-3 & 5865-4—LED fire annunciators provide a visual indication of the current state of system zone inputs.

5883—Relay interface board provides 10 general purpose Form C relays used to control any device that requires a dry contact closure.
Ordering Information (cont.)

Miscellaneous Accessories

A variety of accessories are available to support the FACP operations, troubleshooting, and maintenance.

5660—Silent Knight Software Suite used for programming and viewing events. This is a Windows-based, user-friendly application that can be used at the installation site or remotely with a modem.

5670—Silent Knight Software Suite used for facility management. This is a powerful end-user facility management software that allows for viewing of detector status and event history via a modem or a direct connection.

Plex-1—Door accessory that combines a dead front cabinet door with a clear window, limiting access to the panel while providing single button operation of the reset and silence functions to satisfy those jurisdictions where required.

RBB—Remote back up battery box accessory cabinet that is used if backup batteries are too large to fit into the FACP cabinet.
# Features Summary

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboard Addressable Points</td>
<td>127</td>
</tr>
<tr>
<td>Maximum Addressable Points with Optional 5815XL SLC Expanders</td>
<td>508</td>
</tr>
<tr>
<td>Notification Appliance Circuits</td>
<td>6 Onboard; Expandable to 56</td>
</tr>
<tr>
<td>Power Supply</td>
<td>6A</td>
</tr>
<tr>
<td>ANSI Compliance</td>
<td>3.41 Cadence</td>
</tr>
<tr>
<td>Uploading/Downloading System Programming, Detector Status, and Event Information</td>
<td>Local using 5660 SKSS or Annunciator and remote capability using 5660 SKSS</td>
</tr>
<tr>
<td>Digital Communicator</td>
<td>Built-in</td>
</tr>
<tr>
<td>Relay Outputs</td>
<td>3</td>
</tr>
<tr>
<td>Remote Annunciator Display Types Available</td>
<td>LCD and LED</td>
</tr>
<tr>
<td>Onboard Annunciator</td>
<td>80 Character LCD</td>
</tr>
<tr>
<td>Alarm Reporting</td>
<td>By Point or Zone</td>
</tr>
<tr>
<td>Communication Bus</td>
<td>RS-485</td>
</tr>
<tr>
<td>Panel Connectivity for Programming</td>
<td>USB or Serial</td>
</tr>
<tr>
<td>Event History Storage</td>
<td>1,000 Events Stored in Non-volatile Memory</td>
</tr>
<tr>
<td>Device Naming</td>
<td>Customizable text labels for detectors and modules for easy point identification</td>
</tr>
<tr>
<td>Printing</td>
<td>Detector Status, Event History, and Real Time Event Log with Optional 5824</td>
</tr>
<tr>
<td>Approvals</td>
<td>NFPA; UL; CSFM 7170-0059: 135; MEA 429-92-E Vol. VI; FM</td>
</tr>
</tbody>
</table>