

Features

The Connected Services Gateway (CSG) is an all-in-one interface card that supports central station communication and enables SafelINC Cloud Services. The CSG has the following features:

- Wired or wireless central station communication through LAN Ethernet, cellular, and plain old telephone service (POTS)
- Remote access for authorized users to manage fire alarm control units (FACUs) through the SafelINC web or mobile app
- A front panel service port

Compatibility

- For use with Simplex 4100ES, 4010ES, 4007ES, 2050FS, and 2250FS FACUs and the 4100ES network display unit
- Backwards compatibility. A migration path is available for existing serial digital alarm communicating transmitters (SDACTs) installed in ES FACUs
- Connects to the ES Network Card with an Ethernet cable

Installation flexibility

- The internally mounted option reduces installation complexity and cost.
- The externally mounted option is available to provide flexibility when space or cellular signal strength is inadequate.

Connectivity flexibility

- You can configure central station reporting with one or dual paths with a primary and secondary path.
- Configure paths to use any of the external connections, telephone line, cellular, or LAN Ethernet connections.
- Antenna extension kits are available for installations with inadequate cellular signal.

Standards and codes

- UL 864 10th edition, Control Units and Accessories for Fire Alarm Systems
- UL 1076, Proprietary Burglar Alarm Units and Systems
- ULC/ORD C1076, Proprietary Burglar Alarm Units and Systems
- CAN/ULC-S559 -13, Equipment for Fire Signal Receiving Centers and Systems
- CAN/ULC-S527 -11, Control Units for Fire Alarm Systems
- ISA/IEC 62443-4-1, Cybersecurity Compliance
- FCC ID: F5318LE9080
- IC: 160A-LE9080

Note: For UL 864 applications, the CSG serves as an interface between the FACU and the Internet for off-premises central station reporting.

Central station communication

Central station supported interfaces

- Dual line phone DACT (ADEMCO Contact ID)
- 10/100 Base-T Ethernet (DSC Fibro protocol)
- Cellular (DSC Fibro protocol)

Building event information

The CSG communicates the following specific building event information:

- Point status changes, phone line status, and other off-normal information to the central station and enterprise server.
- Reports up to ten events through a call.

Central station reporting configuration

- The ES Programmer installation includes a new personal computer application: the Central Station Configuration Tool (CSCT)
- The ES Programmer invokes the CSCT when editing central station settings

Path configuration

The CSG receives system status messages from the host FACU and communicates the information to a digital alarm communicator receiver (DACR) at the central station using single or dual communication paths. The path configuration options are listed in [Table 1](#).

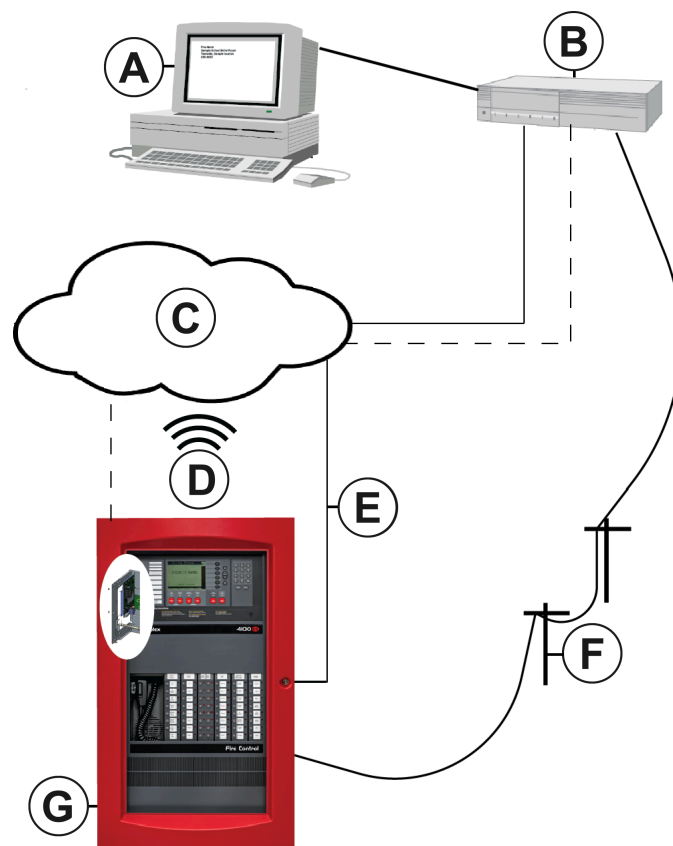
Table 1: Path configuration

Primary path	Secondary path
IP, see note 1	-
IP, see note 1	IP, see note 1
Telephone	IP, see note 1
Telephone, see note 2	Telephone, see note 2

Note:

1. IP can be cellular GSM 4G/LTE or Ethernet LAN/WAN.
2. For UL applications, the secondary path cannot be another telephone line. For ULC-S559, the CSGs are evaluated as active communication systems. You can only use an IP path. For UL 1076 compliance, you must install the CSG in the FACU.

Figure 1: Central station reporting



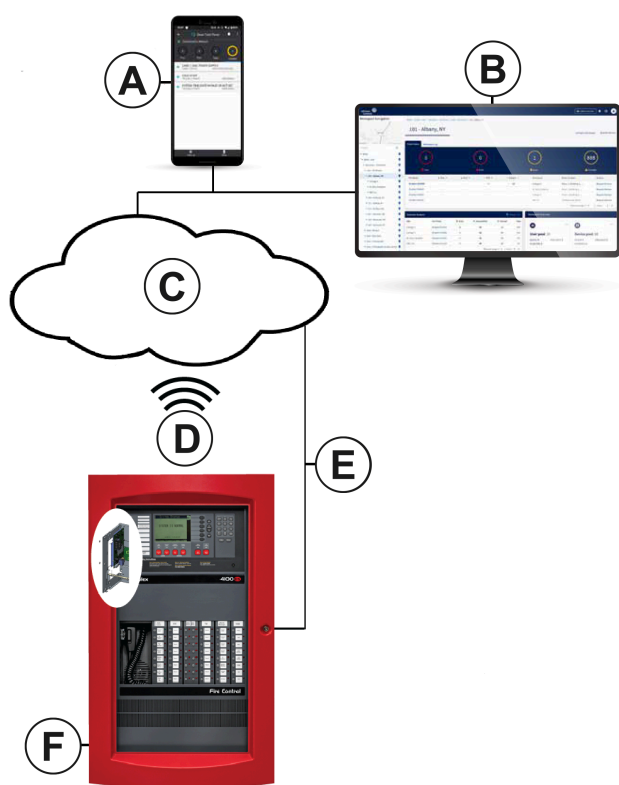
Callout	Description
A	Central station message with customer location and action list
B	Central station monitoring service
C	Internet
D	4G or LTE cellular connection
E	Ethernet connection
F	POTS connection
G	FACU with an internal CSG and cellular module

SafeLINC Cloud Services

SafeLINC Cloud Services is a service facilitated by the CSG that creates a digital twin of the fire alarm system and provides remote access to fire alarm system activity to authorized users. SafeLINC Cloud Services has the following features:

- An encrypted and secure connection to the FACU through iOS®, Android®, and web applications
- Compliance with internationally recognized cyber security standards
- Real-time FACU events notification, including Fire, Pri2, Supv, and Troubles
- A single portal to view all connected FACUs
- Access to the latest FACU status reports
- Advanced analytics facilitates preventative maintenance of the system
- SIM card management portal

Figure 2: SafeLINC Cloud



Callout	Description
A	SafeLINC Cloud mobile app
B	SafeLINC Cloud web user interface
C	SafeLINC Cloud
D	4G or LTE cellular connection
E	Ethernet connection
F	FACU with an internal CSG and cellular module

Connected Services Gateway

The CSG connects a FACU to the SafeLINC Cloud Platform. The CSG maintains a secure connection to the Cloud Platform by using any of the available communication methods and transfers the FACU's configuration, status, and events.

SafeLINC Cloud Platform

The Cloud Platform connects FACUs to the cloud and sends its status and events. The Cloud Platform is responsible for managing the link between the equipment and a user's account. It generates notifications in the form of emails or mobile application push notifications when an FACU event is reported.

SafeLINC Web Application UI

You can access the web UI with most modern web browsers. The web UI shows connected devices and their current state. You can also add new connected equipment to your workspace, invite other users, configure notifications for equipment events, and manage the SIM cards.

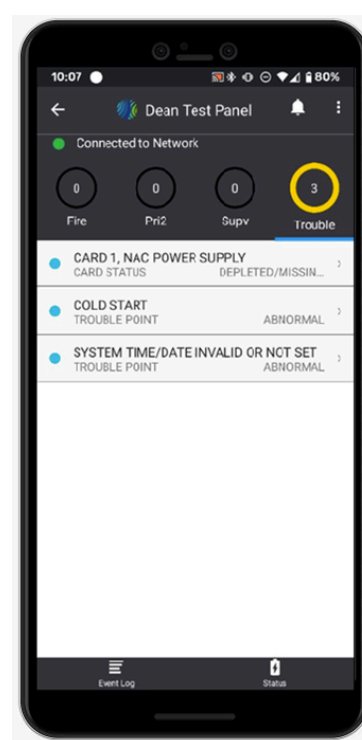
Remote access

To ensure operational security and compliance, remote access is strictly controlled by the account and the technical role of the user. This ensures that only qualified personnel perform complex tasks. For more information, refer to *Remote Access Feature for Connected Services Gateway (A16382C1LM)* or the SafeLINC Cloud help menu.

SafeLINC mobile app

Use the SafeLINC mobile app to supervise your managed FACUs and receive push notifications about FACU events on-the-go.

Figure 3: SafeLINC mobile app



Accessing the SafeLINC app

To access the SafeLINC web app, visit the following link:

<https://safelinc.johnsoncontrols.com/>

To download the SafeLINC mobile app, point your device's camera at the appropriate QR code for the Google Play Store or the Apple App Store.

See Figure 4 and Figure 5, or type one of the following addresses:

Figure 4: QR code for the SafeLINC mobile app on the Google Play Store



<https://play.google.com/store/apps/details?id=com.jci.safelinc>

Figure 5: QR code for the SafeLINC mobile app on the Apple App Store



<https://apps.apple.com/us/app/safelinc/id1494023367>

Product selection

All CSGs have Ethernet and POTS connections. You require a Cellular Module for 4G or LTE cellular connections, see [Table 4](#). The 4100-CSG-PNP includes a Cellular Module.

Table 2: Connected Services Gateway PIDs

Model	FACU type	Description	Available features
4100-CSG-PNP	4100ES	CSG with IP Communicator, 4007-6416 Cellular Module, and bracket for side mounting	Central Station and SafeLINC Cloud
4100-2504	4100ES	CSG with IP Communicator and bracket for side mounting	Central Station and SafeLINC Cloud
4100-2506	4100ES	CSG with IP Communicator and bracket for vertical mounting	Central Station and SafeLINC Cloud
4010-2504	4010ES	CSG with IP Communicator	Central Station and SafeLINC Cloud
4007-2504	4007ES	CSG with IP Communicator	Central Station and SafeLINC Cloud
2250-9800	2050FS and 2250FS	CSG with IP Communicator	Central Station

Table 3: External boxes

Model	FACU type	Description	Ordering information
2975-9234	4007ES,	External box, red	This is required when you order a 4007-6417 for 2050FS or 2250FS FACU.
2975-9235	4010ES,	External box, platinum	
2975-9236	4100ES, 2050FS, and 2250FS	External box, beige	
4100-6900	4100ES	20 ft (6.1 m) Power harness for CSG external enclosure	Optional
4010-6900	4010ES		
4007-6900	4007ES		
0734-383	2050FS and 2250FS	6 ft (1.8 m) Communication cable for external FS gateway module	Required when you order 4007-6417 for a 2050FS or 2250FS FACU.

Table 4: Cellular modules and antennae

Model	Compatibility	Description	Market
4007-6416	4007ES, 4010ES, 4100ES, CSG	GSM 4G/LTE Cellular Module kit for internal installations with Universal SIM.	US and Canada
4007-6417	4007ES, 4010ES, 4100ES, 2050FS, 2250FS, CSG	GSM 4G/LTE Cellular Module kit for external box installations with Universal SIM	
4007-6405	4007-6416 and 4007-6417	15 ft (4.57 m) antenna extension kit	
4007-6406	4007-6416 and 4007-6417	25 ft (7.62 m) antenna extension kit	
4007-6407	4007-6416 and 4007-6417	50 ft (15.24 m) antenna extension kit	
CSG-SIM	4007-6416 and 4007-6417	Universal SIM kit. Use to upgrade a 4007-6416 released before March 2024.	

Table 5: SafeLINC licenses

Model	Description	License details	Market
SAFELINC-LITE	SafeLINC Cloud without Remote Access	With this license you can connect CSGs to SafeLINC for remote visibility and notification services. One license is required for each CSG.	US and Canada
SAFELINC-PRO	SafeLINC Cloud with Remote Access	With this license you can connect CSGs to SafeLINC for remote visibility, notification services, remote commands, and remote service capabilities for professional service providers. One license is required for each CSG.	

Specifications

Table 6: CSG electrical specifications

Specification	Rating	
Voltage DC	Nominal 24 V	Battery
Current DC	125 mA	125 mA

Table 7: Cellular module electrical specifications

Specification	Rating
Voltage DC	Nominal 24 V draw through the CSG
Current DC	20 mA

Table 8: CSG and cellular module environmental specifications

Specification	Rating
Temperature	Normal operation with ambient temperature outside the cabinet at 32°F to 120.2°F (0°C to 49°C)
Humidity	Normal operation under non-condensing humidity conditions up to 93% relative humidity at 100.4°F (38°C)

Table 9: External box

PIDs	Width	Depth	Height
2975-9234 red	9.4 in. (23.9 cm)	2.3 in. (5.8 cm)	6.1 in. (15.5 cm)
2975-9235 platinum			
2975-9236 beige			

Table 10: Antenna specifications

	4007-6405	4007-6406	4007-6407
Specification	Rating		
Antenna type	1/4 wave helical	1/4 wave helical	1/4 wave helical
Gain	3.0 dBi	3.0 dBi	3.0 dBi
Polarization	Linear vertical	Linear vertical	Linear vertical
Frequency range	698 MHz to 2700 MHz	698 MHz to 2700 MHz	698 MHz to 2700 MHz
Azimuth beam width	Omnidirectional	Omnidirectional	Omnidirectional
Total weight including cable	1.68 lbs (0.76 kg)	2.16 lbs (0.98 kg)	3.44 lbs (1.56 kg)
Antenna length / diameter	13.1 in. (333 mm)	13.1 in. (333 mm)	13.1 in. (333 mm)
Coaxial cable length	15.1 ft (4.6 m)	24.6 ft (7.5 m)	49.2 ft (15 m)
Connector type	RP-SMA male	RP-SMA male	RP-SMA male

Table 11: SIM card specifications

Networks	APN	Data allowance	Activation
Multi-network. Connects to the best available network. This includes AT&T, Verizon, and T-mobile for US, and Rogers and Bell for Canada.	wbdata	1 GB for each month	The SIM ships ready with activation instructions