

Features

The Connected Services Gateway (CSG) is an all-in-one interface card that supports central station communication and enables SafeLINC Cloud Services

- Provides wired or wireless central station communication through LAN Ethernet, cellular and plain old telephone service (POTS)
- Enables authorized users to access their managed fire alarm control units (FACUs) remotely through SafeLINC web or mobile app
- Preserves front panel service port

Compatibility

- For use with Simplex 4100ES, 4010ES, and 4007ES FACUs
- Backwards compatibility. Migration path for existing SDACT installed in ES panels only.
- Connects to ES Network Card with Ethernet cable

Installation flexibility

- Internally mounted option reduces installation complexity and overall cost
- Externally mounted option available to provide flexibility when space or cellular signal strength is inadequate

Connectivity flexibility

- Central station reporting configurable with one, or dual paths with a primary and secondary path
- Paths can be configured to use any of the external connections, telephone line, cellular or LAN Ethernet connections
- Antenna extension kits 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

For UL 864 Applications the CSG serves as an interface between the FACU and the Internet for off-premise central station reporting.

Central station communication

Central station supported interfaces

- Dual Line Phone DACT (ADEMCO Contact ID)
- 10/100 Base-T Ethernet (Fibro protocol)
- Cellular (Fibro protocol)

Provides specific building event information

- Communicates 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 PC application, 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 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* | - |
| IP* | IP* |
| Telephone | IP* |
| Telephone** | Telephone** |

* IP can be cellular GSM 4G/LTE or Ethernet LAN/WAN.
** For UL applications the secondary path cannot be another telephone line. For ULC-S559, the CSGs are evaluated as active communication system. You can use IP path only. For UL 1076 application, you cannot install the CSG remotely in its own enclosure.

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.

- Encrypted and secure connection to the FACU through iOS®, Android®, and web applications
- Developed in accordance with internationally recognized cyber security standards
- Provides real-time FACU events notification, including Fire, Pri2, Supv, and Troubles
- Single portal facilitates users to view all their connected FACUs
- Download and view latest FACU status reports
- Advanced analytics facilitates preventative maintenance of the system

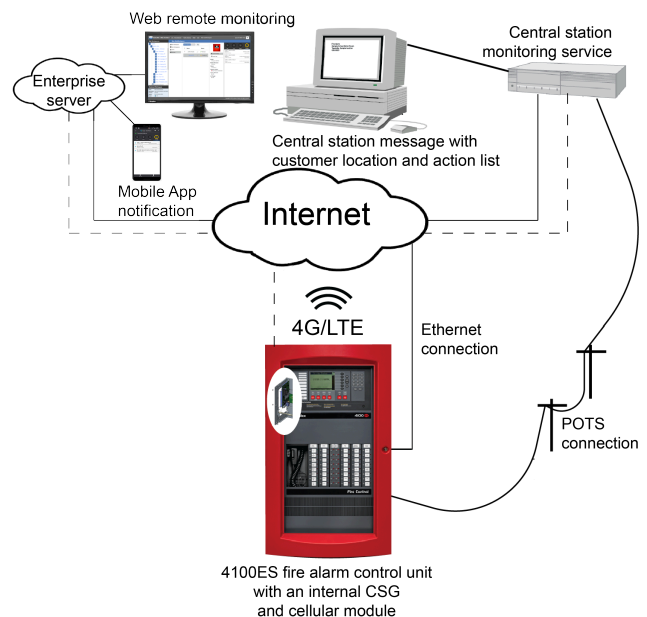


Figure 1: SafeLINC Cloud with central station reporting

* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7300-0026:0505 for allowable values and/or conditions concerning material presented in this document. Additional listings may be applicable; contact your local product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.

SafeLINC Cloud Services

Enterprise server reporting features IP and cellular capabilities.

Connected Services Gateway

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

The CSG natively implements a generic fire panel protocol that you can use with any panel, and that you can adapt to support other legacy fire panel protocols.

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 and for generating notifications in the form of emails or mobile application Push Notification when a panel event is reported.

SafeLINC Web Architect user interface (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, and configure notifications for equipment events.

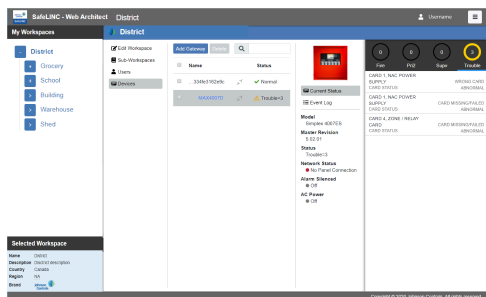


Figure 2: SafeLINC Web Architect UI

Figure 2 shows a typical SafeLINC Web Architect UI, which can include the following information:

Workspaces

The SafeLINC Cloud Platform is composed of a collection of hierarchical containers called workspaces that enables authorized users to manage sub-workspaces, connected devices and authorized users. The workspace architecture provides flexibility for all users, from large commercial users managing multiple connected FACUs to single panel users at a local level.

Selected Workspace

A detailed view of a specific workspace with the following information:

- Name and description
- Associated country and region

Sub-Workspace

View a non-aggregated list of CSGs and fire panels associated with a workspace.

A detailed view of a specific Gateway with the following information:

- Name or Unique Identifier (UID)
- Connectivity status to Cloud
- Operational status
- Cellular IMEI and ICCID, if available
- Current firmware version
- Associated fire panel

A detailed view of a specific fire panel with the following information:

- Brand and model

- Name
- Revision
- Connectivity status to Gateway
- Alarm Silenced Status
- AC Power status
- Current or last known active status by type (Fire, Pri2, Supv or Trouble)
 - Active events count with acknowledge status
 - List of active events with acknowledge status
 - Details of the event
- Fire panel event log with filtering, search, and export capabilities

Notification settings

Notification settings include the following actions:

- Enable or disable all notifications by type
- Enable or disable specific notifications by Push or Email
- Configure notifications from individual fire panels

SafeLINC mobile app

The SafeLINC mobile app allows users to supervise their managed fire panels and receive push notifications about FACU events on-the-go.

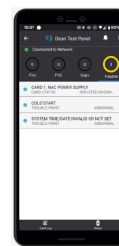


Figure 3: SafeLINC mobile app

Mobile app features

- Login with Microsoft account credentials
 - View assigned root workspace and all associated sub-workspace hierarchy
 - A detailed view of a specific workspace
 - View non-aggregated list of fire panels associated with a workspace
- A detailed view of a specific fire panel with the following information:

- Name
- Connectivity status
- Alarm Silenced status
- AC power status
- Current or last known active status by type (Fire, Pri2, Supv or Trouble)
 - Active events count with acknowledge status
 - List of active events with acknowledge status
 - Details of the event
- Event log with filtering and search capabilities
- Push notifications from selected fire panels and event types. Configure notifications in the Web UI.
- View list of push notifications received

Email

Email notifications from selected fire panels and event types. Configure notifications in the Web UI.

Product selection

Table 2: Connected Services Gateway PIDs

| Model | FACU type | Description | Ordering information |
|-----------|-----------|---|---|
| 4100-2504 | 4100ES | Connected Services Gateway with IP Communicator: side mounted | Optional: either 4100-2504 or 4100-2506 is required |
| 4100-2506 | 4100ES | Connected Services Gateway with IP Communicator: vertically mounted | Optional: either 4100-2504 or 4100-2506 is required |
| 4010-2504 | 4010ES | Connected Services Gateway with IP Communicator | Required selection |
| 4007-2504 | 4007ES | Connected Services Gateway with IP Communicator | Required selection |

Table 3: External boxes

| Model | FACU type | Description | Ordering information |
|-----------|----------------------------|--|----------------------|
| 2975-9234 | 4100ES, 4010ES, and 4007ES | External box, red | Optional |
| 2975-9235 | | External box, platinum | |
| 2975-9236 | | External box, beige | |
| 4100-6900 | 4100ES | Power harness for CSG external enclosure | Optional |
| 4010-6900 | 4010ES | | |
| 4007-6900 | 4007ES | | |

Table 4: Cellular modules and antennae

| Model | FACU type | Description | Ordering information |
|-----------|-----------|---|---------------------------------|
| 4100-6416 | 4100ES | GSM 4G/LTE Cellular Module kit for internal installations | Optional; SIM card not included |
| 4100-6417 | | GSM 4G/LTE Cellular Module kit for external box installations | |
| 4010-6416 | 4010ES | GSM 4G/LTE Cellular Module kit for internal installations | Optional; SIM card not included |
| 4010-6417 | | GSM 4G/LTE Cellular Module kit for external box installations | |
| 4007-6416 | 4007ES | GSM 4G/LTE Cellular Module kit for internal installations | Optional; SIM card not included |
| 4007-6417 | | GSM 4G/LTE Cellular Module kit for external box installations | |
| 4100-6405 | 4100ES | 15 ft (4.57 m) antenna extension kit | Optional |
| 4010-6405 | 4010ES | | |
| 4007-6405 | 4007ES | | |
| 4100-6406 | 4100ES | 25 ft (7.62 m) antenna extension kit | Optional |
| 4010-6406 | 4010ES | | |
| 4007-6406 | 4007ES | | |
| 4100-6407 | 4100ES | 50 ft (15.24 m) antenna extension kit | Optional |
| 4010-6407 | 4010ES | | |
| 4007-6407 | 4007ES | | |

Table 5: SafeLINC licenses

| Model | Description | Ordering information |
|------------------|--|--|
| SAFELINC_GWY_SW | Single gateway license to SafeLINC Cloud | Required to connect FACU to SafeLINC cloud |
| SAFELINC_USER_SW | Single user license to SafeLINC Cloud | Required to access SafeLINC Cloud |

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

| | 4100-6405 4010-6405 4007-6405 | 4100-6406 4010-6406 4007-6406 | 4100-6407 4010-6407 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 | 698-2700 MHz | 698-2700 MHz | 698-2700 MHz |
| Azimuth beam width | Omnidirectional | Omnidirectional | Omnidirectional |
| Total weight including cable | 1.68 pounds (0.76 kg) | 2.16 pounds (0.98 kg) | 3.44 pounds (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 |