600 Series SmartLink™

by Honeywell

Description

The Gamewell-FCI SmartLink™ Network provides a peer-to-peer interface that allows up to 250 Gamewell-FCI, 600 Series Fire Alarm Control Panels (FACPs) to be linked in a network. Each FACP (node) maintains its own program specific to its area of protection while communicating with the network system. All events are displayed on every panel's LCD annunciators and any point of annunciation can be programmed to be a point of control. This feature allows each panel to signal and control elements in its own area based on alarms and other conditions occurring in other panels.

The SmartLink™ network with NFPA Class A Style 7 network cabling provides the greatest overall system reliability possible. If a panel or any other type of node becomes isolated from the network, the network will "heal" itself around the isolated node and continue to operate normally. Any isolated panel will revert to stand-alone operation with full local programming. The SmartLink™ system will also support Class B connections. No main polling computer is required.

Control-by-event programming allows selected groups of input devices to be logically arranged to selected groups of output devices or circuits in individual panels. In a Smart-Link™ network, a panel in alarm broadcasts information that includes point, input group assignment, and an event code. This single broadcast message is received simultaneously by all panels on the network. Using SmartLink™, the network control-by-event function can be employed to tie events to output devices or circuits in panels other than just the panel of origin within the network.

Peer-to-Peer Fire Alarm Network

SmartLink

Features

- Listed per ANSI/UL® 864, 9th Edition
- Peer-to-peer communication
- Interconnect any and all 600 Series FACPs
- Network up to 250 FACPs (nodes)
- Class A/Style 7 or Class B network wiring
- Assignable main control location
- Network-wide event messaging
- Global acknowledge, signal silence, and reset functions
- Self-healing network architecture
- Redundant routers for enhanced survivability
- Windows®-style programming by laptop
- Line protectors for campus networking
- Network-wide control-by-event
- Multiple transmission mediums:
  - RS-422 wire, up to 4,000 feet (1219.2 m) of cable between nodes
  - Fiber, up to 1.2 miles (2 km) between nodes.
  - Mixed media, wire and fiber
- High-rise and campus modes

An ISO 9000-2000 Company

SIGNALING

UL LISTED

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Engineer's Specifications

The network shall be capable of connecting up to 250, 600 Series Fire Alarm Control Panels (nodes) in a peer-to-peer environment. The system shall be capable of being interconnected with wire, fiber, or mixed-media wire/fiber cabling. The network shall be wired Class A or Class B as required. The network shall have employed extensive network communication security techniques including data-validation techniques. The network shall be capable of automatic continued communication around interrupted nodes. The protocol shall be a true full-duplex exclusive 9-bit protocol providing simultaneous transmit and receive signaling between nodes. The system shall display all events on all fire alarm control panels (nodes) with any node capable of being programmed as the point of control. The system shall be the SmartLink™ Peer-to-Peer Fire Alarm Network by Gamewell-FCI.

Wiring connections

The network interconnecting wire cable should consist of two twisted-pair, shielded cables between each node.

Each pair may be individually shielded, or the two pairs may be enclosed in a single shield. To assure reliable performance the following shall apply:

- Nominal impedance: 60 ohms
- Maximum capacitance, between pairs:15.5 pf/foot
- Maximum capacitance, conductor to shield: 28 pf/foot
- Maximum wire resistance: 20 ohms/1,000 ft. (304.8 m)
- Maximum shield resistance: 3.5 ohms/1,000 ft. (304.8 m)
- Maximum wire length between any two connectors: 4,000 ft. (1219.2 m)

Fiber connections

Network interconnecting fiber should consist of two fibers between each node.

The network fiber connections shall meet the following requirements:

- Fiber type: multimode, 850 nm
- Maximum fiber length between any two (2) network connections: 1.2 miles (2 km)
- Maximum fiber dB loss between any two (2) network connections: 12 dB (including connectors)
- Connector type: ST®

Note: Feed and return wiring of a Class A installation must be run in separate conduits, with a minimum two-hour fire rating.

Specifications

Operating
Temperature:	+32°F to +120.2°F (0°C to +49°C)
Relative Humidity:	93% non-condensing
Net wiring Class:	Class A, Class B
Maximum Number of Nodes:	250
Maximum Distance between Nodes:	For RS-422 wire, 4,000 ft. (1219.2 m) For fiber, 1.2 miles (2 km)

Ordering Information

Model	Description
GWPTP-NC	Primary network router
GWPTP-RCF	Redundant network router, fiber-optic
GWPTP-RCW	Redundant network router, RS-422 wire
GWPTP-RCM	Redundant network router, fiber/wire
GWSIM-422	Serial interface module (RS-422 wire) with repeater*
GWSIM-FIB	Serial interface module (fiber-optic) with repeater*
GWSIM-422/FIB	Serial interface module (wire/fiber) with repeater*
GWLP-864SN	Line protector
GW71332	Programming interface cable

*One SIM Module needed for each FACP in the SmartLink™ network.