Honeywell | Voice Evacuation

Gamewell FCI

NetSOLO® Broadband

Intelligent, Networked, Multi-Channel Fire Alarm Control and Emergency Voice Evacuation System

General

The NetSOLO® Broadband is a revolutionary advance in fire detection and emergency voice evacuation system design. NetSOLO® Broadband employs the proven technology of the 7100 Series fire alarm control panel and expands it to accomplish emergency multi-channel voice evacuation.

It is a true peer-to-peer, token passing, networked system capable of supporting up to sixty-four individual nodes. All systems status, control-by-event sequences, audio voice paging, and fire fighter telephone signals are sent between the nodes over just a single pair of wires or fiber-optic cable.

Each NetSOLO Broadband node can be spaced along the network a maximum distance of 3,000 feet (914.4 m) over an unshielded twisted-pair of wires or up to an 8dB loss using fiber-optic cable. Built-in isolation at each node permits Style 4, 6, and 7 network configurations.

NetSOLO Broadband is capable of the most sophisticated sequences of operations. The Field Configuration Program (FCP-NetSOLO) is based on Boolean logic statements providing AND, OR, NOT, and XOR logic operators. These operators can be combined to produce additional Boolean operators such as NAND, NOR, XNOR, etc. A comprehensive set of timing functions can also be attached to any input/output logic statement for staggered reset of fan control relays, time-delayed alarm activation, automatic system silence, etc.



NetSOLO Broadband

FEATURES & BENEFITS

- IBC Seismic Certified
- All communication signals and control-by-event sequences transmit over a single pair of twisted unshielded wires or fiber-optic cable
- Distributed Architecture, including Style 7 wiring configurations allow system components to continue normal operation with no loss of function during single line fault conditions
- Ideal for a wide range of complex system applications including high-rise or campus installations
- Integrates 7100 NetSOLO Series fire alarm control panels, INX transponders and INCC command centers to create a complete audio evacuation system with up to sixty-four nodes
- Offers a network data transfer rate at 625K baud
- Graphic Network Annunciator (NGA) (optional)
- Each INCC supports up to sixteen ASM-16 addressable switch modules for a total of 256 switches in which the software can be programmed separately
- Remote 48 LED Driver Module (ANU-48) (optional)
- Redundant command centers with microphone and fire fighter's handset easily configured by adding INCCs
- State-of-the-art digital signal processor (DSP) technology for efficient audio compression and filtering
- Software-programmable, multi-channel digital audio applications
- Up to 150 watts of audio power (three AM-50 Series amplifier modules) with an additional 50 watts of standby power in each intelligent network transponder (INX CAB-B) cabinet)
- Each AM-50 Series amplifier module provides two individually activated speaker circuits supplying 50 watts total of power
- Sixteen message capacity with up to 3 minute duration per INX
- Messages easily field-configurable with a laptop computer
- Advanced Boolean Logic-based programming such as AND, OR, NOT, NOR, time delay, and calendar functions configurable through computer programming

General

The 7100 NetSOLO is a microprocessor-based fire alarm control panel with two analog, addressable signaling line circuits (SLC).

Each 7100 is equipped with an Intelligent Network Interface Module for unshielded, twisted-wire and fiber-optic cable (INI-7100 FO). Options include an integral Digital Alarm Communicator Transmitter (DACT) supporting the most popular reporting formats.

The Intelligent Network Command Center (INCC) serves as the point of interface between an operator and the system's audio evacuation, fire fighter intercom and building network. The INCC occupies a single address on the NetSOLO Broadband network. A typical INCC assembly consists of the following:

- An Intelligent Network Interface-Voice Gateway (INIVG) module (fiber-optic or unshielded twisted-pair)
- INI-VGC-UTP (unshielded twisted-pair only)
- One or more Addressable Switch Modules (ASM-16)
- Optional Graphic Annunciator (NGA)
- Remote 48 LED Driver Module (ANU-48)

Options include a voice paging microphone and a fire fighter's handset connecting to the INI-VGC. Each INCC can support up to sixteen ASM-16 modules. Each ASM-16 has sixteen push button switches for a maximum capacity of 256 switches per INCC command center. Each switch has three associated LEDs, colored green, yellow, and red. These switches and their LEDs are fully programmable to serve any system function desired. They can control audio speaker circuits, notification appliance circuits, addressable relay outputs, fire fighter phone control circuits. Switches may also be customized for any special application that might be required.

Multiple INCCs can be configured into the NetSOLO Broadband network to serve as a completely independent command center for their local area or serve as remote command centers mimicking in part or in whole the function of a main command center.

The Intelligent Network Transponder (INX) acts as a network audio transponder for the NetSOLO Broadband Network. The INX transponder serves as the point of distribution for the system's audio and fire fighter telephone circuits and occupies a single node along the NetSOLO network.

A typical INX assembly consists of the following:

- an Intelligent Network Interface-Voice Gateway (INI-VGX) module
- a PM-9/PM-9G power supply
- up to four AM-50 Series amplifiers

The INX transponder occupies a single address on the network and provides termination points for the network connection using either a pair of twisted, unshielded wire (12 AWG max.) or fiber-optic cable.

The INI-VGX uses advanced Digital Signal Processing (DSP) technology for audio compression and filtering that allows the NetSOLO Broadband to produce the clearest audio possible while conserving the network bandwidth for an instantaneous response. During voice paging and fire fighter communication, background noise is automatically filtered. This feature allows increased audibility and eliminates the need for push-to-talk devices.

The INI-VGX can accommodate up to sixteen different messages with a total combined duration of three minutes. Each message can be installed in the field using a laptop computer. Available message options are voice messaging or evacuation tone.

The INI-VGX also provides a fire fighter phone riser and addressable signal line circuit that connects to multiple phone jacks or warden stations through as many as sixteen AOM-TELF modules. In addition, the INI-VGX SLC can support up to thirty-two speaker circuits using the AOM-2SF for single channel applications.

The INX CAB-B can contain up to four AM-50 Series amplifiers that produce 50 watts of power @ either 25 V_{RMS} or 70.7 V_{RMS} audio output. Each amplifier includes two separate speaker circuits that can be wired Style Y (Class B) or Style Z (Class A). In addition, each amplifier can broadcast its own tone or message independently of other system amplifiers. Thus, an INX transponder can produce three audio channels simultaneously. Each INX transponder can support up to four AM-50 Series amplifiers operating as main amplifiers with one AM-50 Series amplifier used as a fail-safe backup amplifier.

The INX transponder receives its power from a PM-9/PM-9G nine ampere, filtered, switching power supply providing 24 VDC nominal operating voltage. The PM-9/PM-9G has an integral standby battery charger capable of recharging up to 55 A/H batteries. The INX can house up to 12 A/H sized batteries.

Figure 1 illustrates the NetSOLO Broadband System configuration.

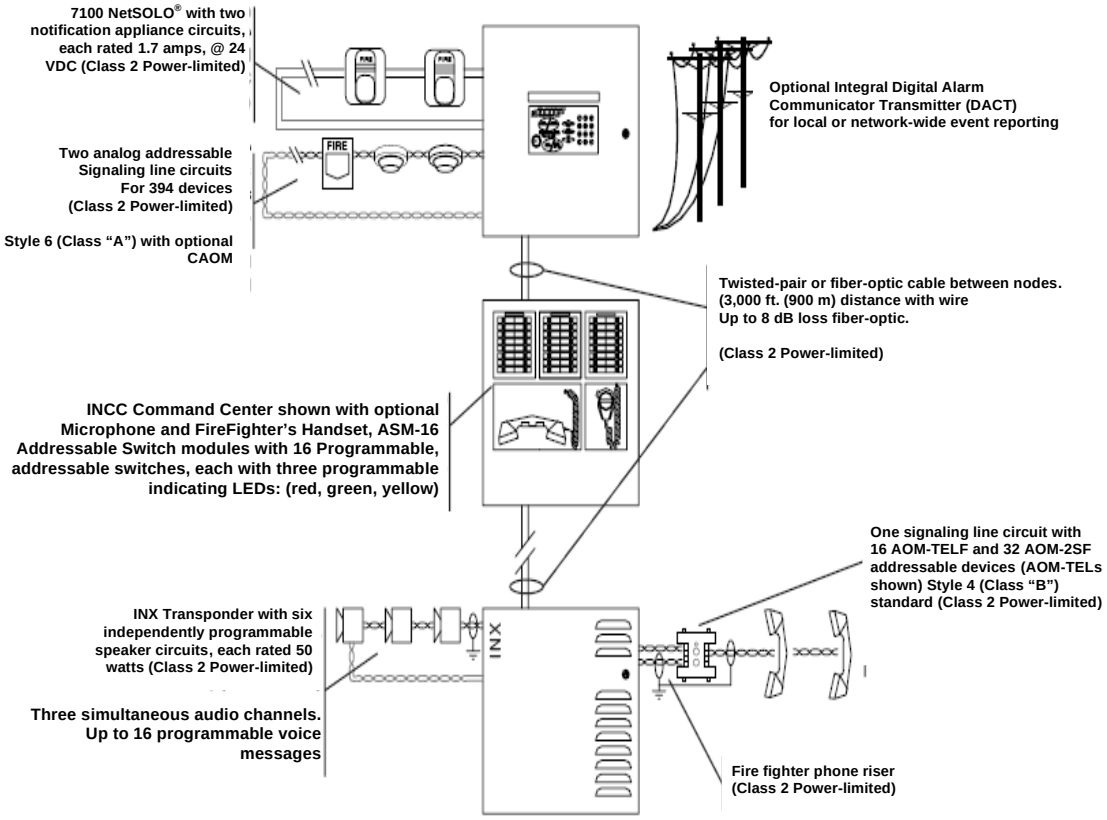


Figure 1 NetSOLO Broadband System

Figure 2 illustrates the NetSOLO Broadband System configuration.

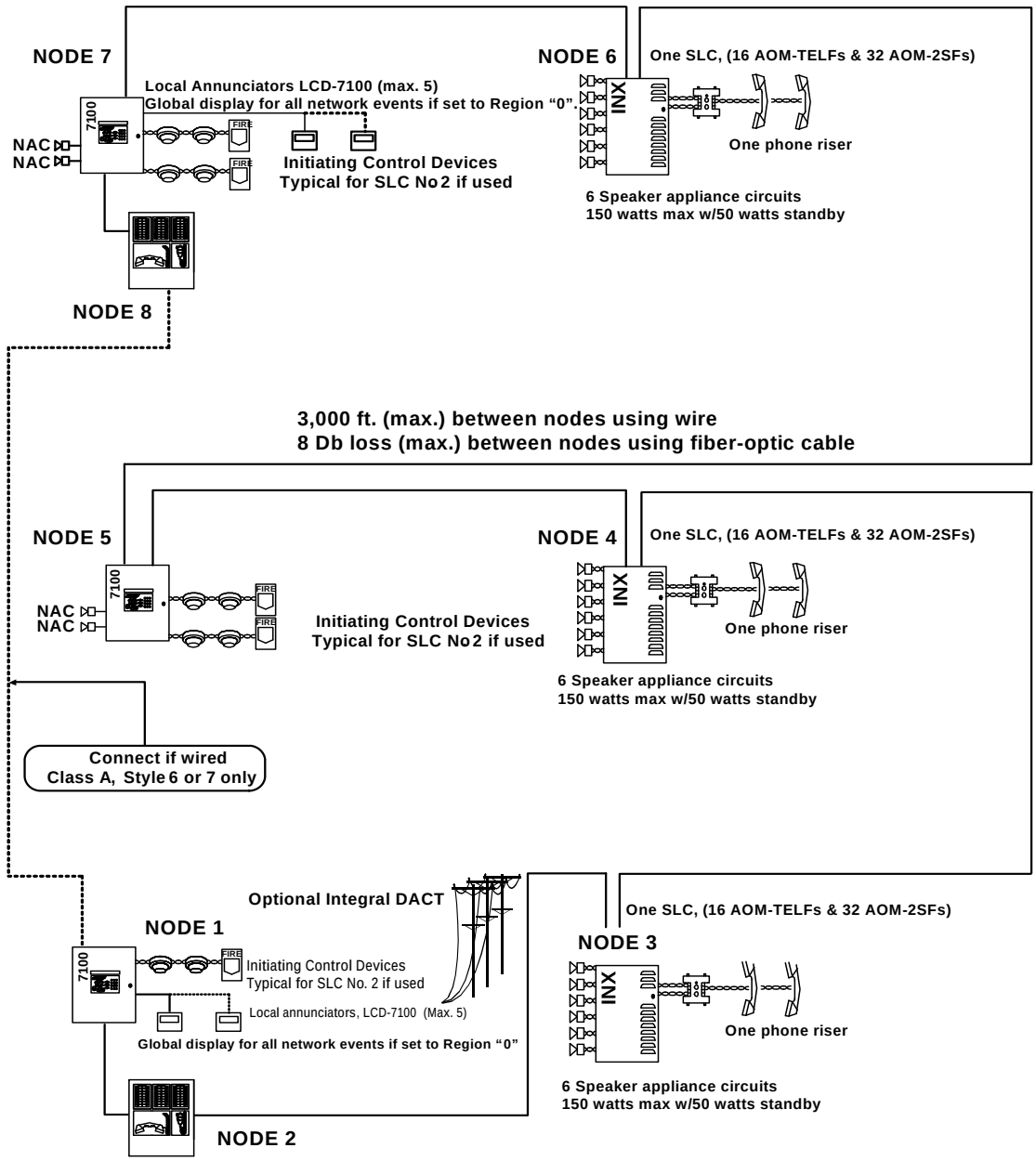


Figure 2 Node Connections

ORDERING INFORMATION

Part Number	Description
INCC Intelligent Network Command Center	
INI-VGC	Command Center Voice Gateway
INI-VGC-UTP	Voice Gateway for fiber-optic and unshielded twisted-pair wire
ASM-16	Programmable Switch Module (occupies single slot of inner door)
NGA	Network Graphic Annunciator
ANU-48	Remote LED Driver
INCC-IDT	Inner door w/one double slot for INCC-TEL fire fighter handset and 4 single slots
INCC-ID	Inner door w/6 single slots
INCC-CABR	INCC backbox (black) with red outer door
Dimensions:	19" W x 19" H x 4" D
	(48 W x 48 H x 10 D cm)
Optional Accessories	
ANU-48	Remote LED Driver
INCC-TEL	Fire Fighter Telephone Handset (requires INCC-IDT Inner Door)
INCC-MIC	Paging Microphone Module (occupies one single slot of Inner Door)
INCC-BP	Command Center Blank Face Plate (occupies one single slot of Inner Door)
INX Intelligent Network Transponder	
INX-VGX	Transponder Voice Gateway
PM-9/PM-9G	INX 9 ampere Power Supply
AM 50 Series Amplifiers:	
AM-50-25	INX 50 Watt amplifier @ 25 VRMS output
AM-50-70	INX 50 Watt amplifier @ 70.7VRMS output

ORDERING INFORMATION

Part Number	Description
Cabinets:	
INX-CAB	INX Backbox with Black Door
Dimensions:	19" W x 19" H x 4" D
	(48 W x 48 H x 10 D cm)
INX-CABR	INX Backbox with Red Door
Dimensions:	19" W x 19" H x 4" D
	(48 W x 48 H x 10 D cm)
INX CAB-B	Enclosure louvered door and INX-CAB-B Mounting Plate
Dimensions:	19 3/8" W x 19 3/8" H x 4.5" D
	(49 W x 49 H x 11 D cm)

Note: For additional information on the cabinets, refer to the E3 Series Cabinets Data Sheet (Part Number: 9020-0649).

Seismic Battery Bracket Kits

Part Number	Description
90518	NetSOLO NS-INX 7 A/H Seismic Battery Bracket Kit NetSOLO 7100 7 A/H Seismic Battery Bracket Kit
90519	NetSOLO NS-INX 12 A/H Seismic Battery Bracket Kit

Note: For information on the types of Seismic Battery Bracket Kits available and the Seismic Battery Bracket Kit Part Numbers, refer to the following documents:

Seismic Battery Bracket Installation Guide, P/N: 53839

E3 Series Cabinets Data Sheet, P/N: 9020-0649

NetSOLO® Broadband Technical Specifications

SPECIFICATIONS

Detailed product specifications may be found in the following documents:

9020-0542: INCC Intelligent Network Command Center Data Sheet

9020-0531: NetSOLO Data Sheet

9020-0541: INX Intelligent Network Transponder Data Sheet

TEMPERATURE AND HUMIDITY RANGES

This system meets NFPA requirements for operation at 0 – 49°C/32 – 120°F and at a relative humidity 93% ± 2% RH (non-condensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15 – 27°C/60 – 80°F.

STANDARDS

The E3 Series® Broadband System is designed to comply with the following standard:

UL® Standard: UL 864 9th Edition

AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult the factory for the latest listing status.

UL Listed: S1869

FM Approved: 3025415

MEA FDNY: 6077

CSFM: 6911-1703:0116

City of Chicago Approved: 7165-1703:125

City of Denver Approved

ISO 9001 Certification

For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewell-fci.com/en-US/documentation/Pages/Listings.aspx

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

For more information

Learn more about Gamewell-FCI's NetSOLO® Broadband and other products available by visiting www.Gamewell-FCI.com

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