

Description

The INI-7100 Intelligent Network Interface module provides a system that allows you to create a powerful and highly reliable peer-to-peer, token ring, regenerative network of up to 64, 7100 series fire alarm control panels. The network can be configured as Style 4, 6, or 7. Two versions of the INI-7100 are available.

INI-7100-UTP

The INI-7100-UTP is a cost-effective unit that uses conventional 16 or 18 AWG, twisted, non-shielded copper wire to connect between two nodes. Distances between nodes can be up to 3,000 feet (914.4 m). Each INI-7100-UTP regenerates the signal to extend the network another 3,000 feet (914.4 m). See wiring specifications for details.

INI-7100-FO

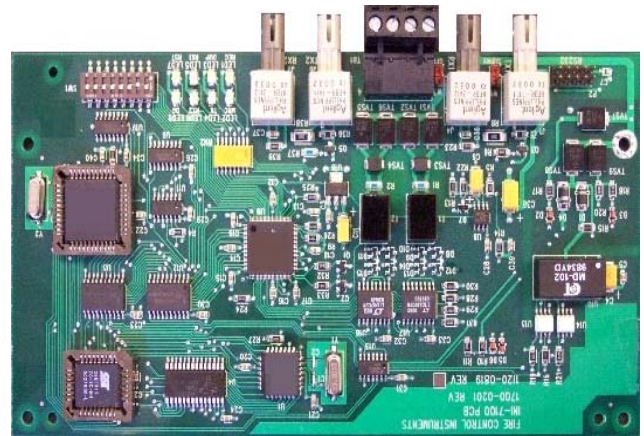
The INI-7100-FO provides connections to fiber-optic cable using type ST connectors as well as retaining the ability to accommodate conventional copper wire. It can use standard fiber-optic cable up to 200 microns (multi-mode) but is optimized for 62.5/125 microns. Signal attenuation can be up to 8 dB between nodes. Fiber-optic cable provides a network with the highest degree of reliability and survivability, impervious to transients, noise or ground faults. It is ideal for applications where the network must be run over long distances or between structures.

Network Features

The INI-7100 is mounted inside the 7100 panel and is connected to the 7100 Basic System Module with the included ribbon cable. A DIP switch on the INI-7100 module is used to set the address that the INI-7100 unit will occupy on the network. The network communication protocol is based upon token passing technology and operates at 625K baud.

Each 7100 series fire alarm control panel retains all the features of a standard 7100 panel, providing two signaling line circuits supporting up to 396 amps.

Intelligent Network Interface Module



INI-7100 Series

Features

- Peer-to-peer, token-ring, regenerative network operating at 625K baud.
- Up to 64, INI-7100 modules in one network.
- Supports Versions using either copper wire (INI-7100-UTP) or both copper wire and fiber-optic cable (INI-7100-FO).
- Each INI-7100 regenerates the signal to extend the network up to another 3,000 feet (914.4 m) (wire) or fiber-optic segment (8 dB loss max.)
- Built-in isolation provides for Style 4 or Style 7 wiring.
- Includes non-polarized network connections.
- Network can be configured into regions for maximum flexibility.
- Mounts inside the 7100 Series control panel cabinets.

SIGNALING



7165-1703:0125
7165-1703:0105



Network Features

Each 7100 series fire alarm control panel retains all the features of a standard 7100 panel, providing two signaling line circuits supporting up to 394 addressable devices, two notification appliance circuits, an optional digital alarm communicator transmitter, etc. (See 9020-0044 for details).

In addition, the network can be divided into regions. Each region can contain one or more 7100 panels. Annunciation of events within a particular region can be limited to just the alphanumeric LCD displays of the 7100 systems that are members of that region. This is useful for multiple-building applications where each building would constitute its own region. Any INI-7100 module can be designated as a global annunciator to annunciate events from all network nodes.

Ordering Information

Part Number	Description
INI-7100-UTP	Intelligent Network Interface Module Unshielded, Twisted-pair
INI-7100-FO	Intelligent Network Interface Module Fiber-Optic

Specifications

Operating Voltage:	24 VDC (through connection between INI-7100 P2 and 7100 BSM J2)
Operating Current:	0.040 amps. (All modes)
Operating Temperature:	30° to 120° F (0° to 49° C)
Relative Humidity:	85% max., non-condensing at 90° F (32° C)
Dimensions:	7 1/2" W x 4" H x 3/4" D inches (19 W x 10 H x 1.8 cm)
Wiring Specifications:	
Copper Wire:	16 to 18 AWG twisted-pair, unshielded. Up to 3,000 feet (914.4 m) between each node.
INI-7100-FO only:	Up to 200 microns (optimized for 62.5/125 microns). Up to 8 dB loss between each node.

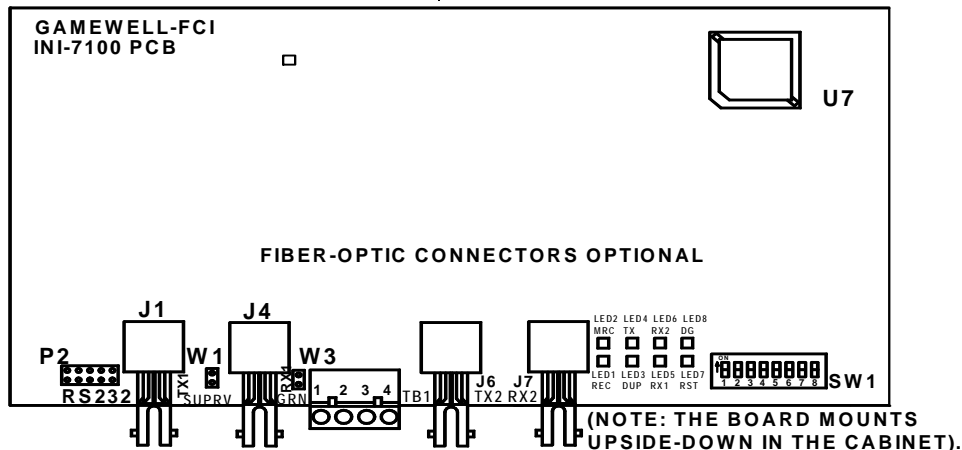


Figure 1 INI-7100

Technical Layout-

- W1** RS-232-Supervision must be installed
- W3-** Ground Fault Supervision
Jumper IN to enable supervision for ground faults on the COM 1 wires connected to Terminals TB1-1 and TB1-2 Jumper OUT for no ground fault supervision. (Note: Remove for fiber-optic connections)
- SW1-** Network ID switch, binary. Must be set to Addresses 1 through 64. Address 0 (zero) is not a valid address

- PS-** RS-232 port. Connects to the 7100 Basic System Module connector J2 (includes power connection)
- TB1-** Terminals 1 and 2 are Channel 1 COM1A & COM1B
Terminals 3 and 4 are Channel 2 COM2A & COM2B
- TX1-** Fiber-optic transmitter for Channel 1
- RX1** Fiber-optic receiver for Channel 1
- TX2-** Fiber-optic transmitter for Channel 2
- RX2-** Fiber-optic receiver for Channel 2