

Network Interface Card (NIC)



Effective: March 2007
K-76-605

FEATURES

- *Interconnects up to 32 ARIES Control Units in NFPA style 4 or 7 configuration*
- *Panel to Panel Communications*
- *Network operation from ARIES control panels or remote displays*
- *Total field programmability via panel front display or ARIES Configuration Tool (ACT) Software*
- *UL Listed*
- *FM Approved*

DESCRIPTION

The ARIES™ Network Interface Card (P/N 76-600000-009) provides true peer-to-peer functionality when installed in the ARIES Control Unit.

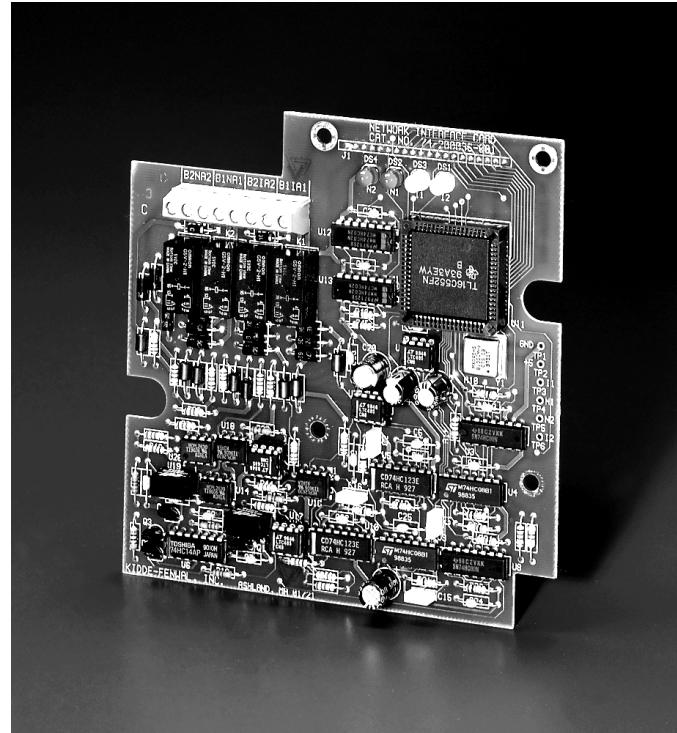
The network is capable of performing the following fire-alarm and/or suppression system operations on a network-wide basis:

- Event initiation
- Protected-premises local and/or remote event annunciation
- Occupant notification via audible and visible signaling appliances
- Process/equipment control to activate safety procedures
- Fire extinguishing system release
- Off-premises transmissions to central station or fire department via third-party digital communicator and programmable relays

The network provides several convenient interconnect programming schemes wherein control panels can be configured individually or within created groups of control panels.

When utilizing the grouping configuration, the interconnection shall automatically provide shared alarm and trouble responses. The programmable shared responses are: acknowledge, silence, reset, event logging and logic statements. Operator events can be activated into the interconnection via the control panels or any annunciator. A location address and programmable description shall identify the panel initiating the event.

Event Output Control (EOC) programming statements can be entered at individual panels, panel by panel, using ARIES Configuration Tool (ACT). After this is done, an input on one panel can activate an output on any other panel, or on all other networked panels programmed to receive the input.



Consistent with peer-to-peer operation and the interconnect wiring style, a panel that becomes disabled shall be automatically isolated from its shared panel(s) and the shared panels will exhibit a network message identifying the affected panel and the fault type. However, the shared panels that are not affected by a fault will remain functional and interconnected.

PHYSICAL

The ARIES Network Interface Card mounts to the Control Unit's printed circuit board as a "daughter" card and provides peer-to-peer interconnection for up to 32 Control Units. All existing ARIES Control Units are capable of accepting the network module.

For additional information, refer to the Installation Instruction Sheet P/N 06-236520-002.

Interconnect NFPA style 4 is accomplished using one pair # 18AWG, twisted/shield wire. Style 7 interconnect will require two pair # 18 AWG, twisted/shielded wire and provides protection against a single wire-to-wire short or open fault.

Communication is RS-485 with a maximum spacing of 4000 ft. between panels and nominal 2.5 second panel to panel response with style 4 wire. This timing increases slightly when operating on a redundant pair under a fault condition.

All electrical and physical characteristics and listings of the network module are consistent with the ARIES host panel.

TECHNICAL SPECIFICATION

Input Voltage:	5 Vdc
Operating Current:	250 mA
Operating Temp:	32°F - 120°F (0°C - 49°C)
Networking Wire:	Style 4 Style 7
Communications:	Per RS-485 Standard 9600 Baud
Wire Type:	Twisted, Shielded, Low-Capacitance Fire Alarm Wire (Recommended) # 18 AWG
Minimum Node-to-Node	4,000 ft.

PROGRAMMING

Modem Connection:	Not available
Field Programming:	Local and network programs entered at individual panels

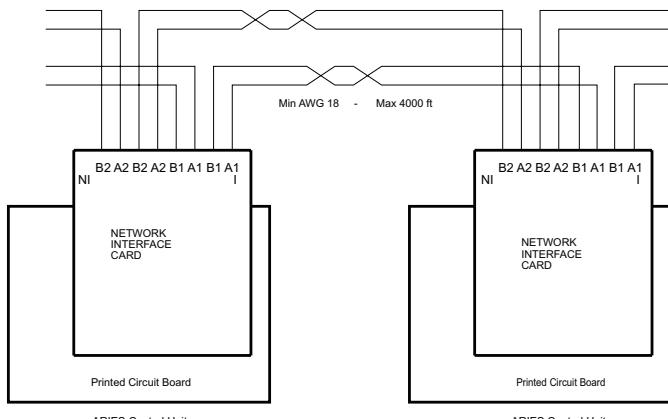


Figure 1. Typical System Block Diagram

ORDERING INFORMATION

Part Number	Description
76-600000-009	Network Interface Card Installation Kit
76-600000-006	Fiber Optic Converter Card (Optional Module)

Kidde is a registered trademark of Kidde-Fenwal, Inc.

ARIES is a trademark of Kidde-Fenwal, Inc.

This literature is provided for informational purposes only. KIDDE-FENWAL, INC. assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to work correctly. If you need more information on this product, or if you have a particular problem or question, contact KIDDE-FENWAL, INC., Ashland, MA 01721. Telephone: (508) 881-2000.