



NOTI•FIRE•NET™

Release 3.0

Section: Network Systems

GENERAL

NOTI•FIRE•NET™ is the interface which allows **NOTIFIER** Intelligent Fire Alarm Control Panels to form a network. Each local control panel (network node) maintains its own area of protection, while monitoring and controlling other areas (other network nodes).

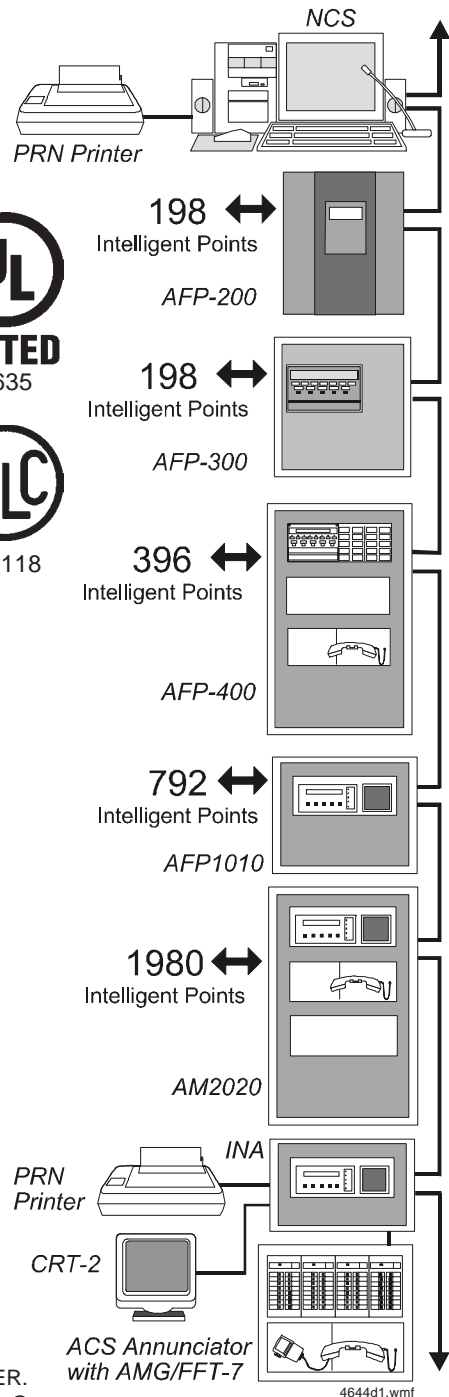
Local information is displayed at each network node. In areas such as a security office, where the entire network must be monitored, network annunciators are available.

NOTI•FIRE•NET™ (NFN) is a token-pass style network based on the proven ARCNET® local area network technology, with four million nodes installed worldwide. This computer LAN architecture makes NFN extremely powerful, yet simple to configure and install.

FEATURES

- Fiber optic (multi-mode), wire, or combination wire/fiber communications path.
- NFPA Style 4 or Style 7 network operation.
- Based on proven ARCNET® technology.
- True peer-to-peer communications. Each node stores its own program and communicates equally with all other nodes.
- Token-passing non-collision protocol.
- No "master" polling computer or other central weak link.
- Inherently regenerative system. Each node acts as a repeater to reshape and regenerate data signals. Failure of any node does not affect any other node/communications among surviving nodes.
- High-speed data communications (312,500 BPS) operates several times as fast as competitive networks.
- Simple plug-in module, the SIB-NET, connects AM2020/AFP1010; and the NAM-232 connects AFP-200, AFP-300, and AFP-400 panels anywhere on the network.
- Multiple Network Control Stations (NCS) may be placed anywhere on the network. Additional NCS's may be used to provide inherent "hot" backup.
- Multiple Intelligent Network Annunciators (INA) may be placed anywhere on the network.
- NCS and INA display all network activity. Unlike competitive systems, the point display capacity is *NOT* held to less than the maximum network capacity.
- Single small-gauge twisted pair wire (no shield necessary) for data communications path.
- Electrical isolation between nodes.
- Network clock synchronization (see page 3).
- History Buffers on INA, NCS, AFP1010, AM2020, AFP-200, AFP-300, and AFP-400 Intelligent Fire Control Panels.
- Powerful Cooperative-Control-by-Event allows point(s) on one node to activate point(s) on other nodes. Any input can turn on any output, network-wide.

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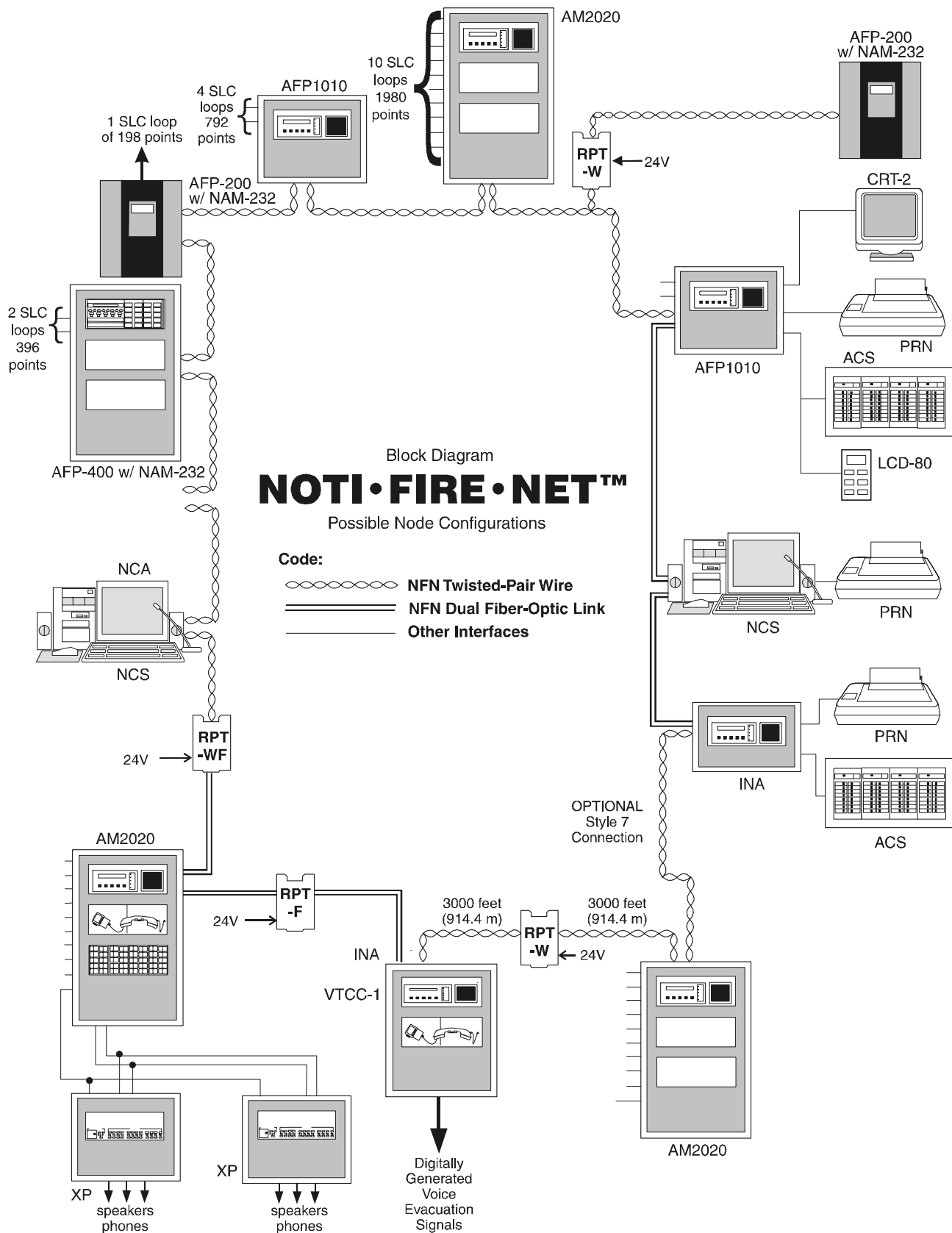
This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**. Phone: (203) 484-7161 FAX: (203) 484-7118



12 Clintonville Road, Northford, Connecticut 06472



Made in the U.S.A.



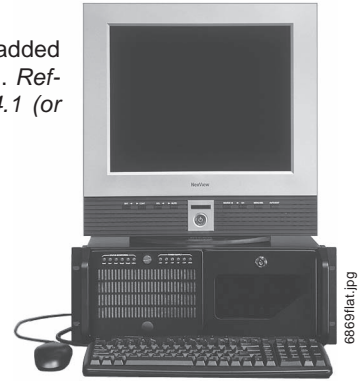
Block Diagram
NOTI-FIRE-NET™
 Possible Node Configurations

Code:
 ~~~~~ NFN Twisted-Pair Wire  
 === NFN Dual Fiber-Optic Link  
 ——— Other Interfaces

## NCS NETWORK CONTROL STATION

The NCS is based on a UL 864-recognized computer. Special hardware and software are added by **NOTIFIER** to make the NCS operate as a Command Center for **NOTI•FIRE•NET™**. Reference separate NCS data sheet for more detailed information. **NOTE:** NCS version 4.1 (or higher) is compatible with **NOTI•FIRE•NET™** version 3.0.

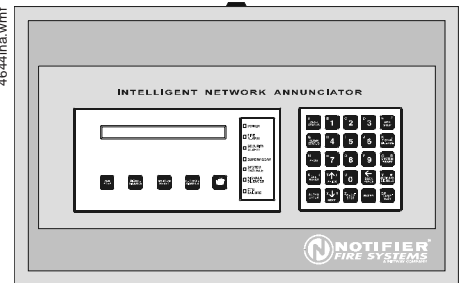
| PENTIUM-BASED COMPUTER (NCS)                 |                                       |
|----------------------------------------------|---------------------------------------|
| • Intel® 2.0 GHz Pentium® IV microprocessor. |                                       |
| • 256 KB cache memory.                       | • Sound card, speakers, & microphone. |
| • 256 MB RAM.                                | • PS/2 mouse.                         |
| • 40 GB hard drive.                          | • 300 Watt power supply.              |
| • 1.44 MB floppy drive.                      | • 2 ISA & 4 PCI slots.                |
| • 17" flat-screen LCD monitor.               | • Windows® 2000 Professional.         |
| • 104-key keyboard.                          | • 56K modem.                          |
| • 24/10/40X CD-ROM.                          | • One-year warranty.                  |



## INA INTELLIGENT NETWORK ANNUNCIATOR

The INA provides full annunciation of all network signals and may optionally allow system control functions.

- 80-character, backlit LCD display shows all network alarms and troubles.
- LEDs for POWER, FIRE ALARM, TROUBLE/SECURITY ALARM, SUPERVISORY, ALARM SILENCED, DISABLED POINTS, and CPU FAILURE.
- Switches for ACK/STEP, SIGNAL SILENCE, SYSTEM RESET, and LAMP TEST.
- Alphanumeric keypad with tactile and audible feedback.
- Nonvolatile time of day clock and history file.
- Two optically-isolated EIA-232 ports for printer and CRT terminal.
- Optically-isolated EIA-485 Port for LED, LCD, or Graphic annunciation.
- Mounts in ABF-4 flush cabinet, with AKS-1 electrical key switch.
- Mounts in ABS-4D surface/semi-flush cabinet with door and key lock.
- Mounts in CAB-3 or CAB-4 Series cabinets, using ADP-4 hinged dress panel.
- Accepts one MIB Series module (required).
- 24 VDC power from remote or local supply (CAB-3/-4 Series cabinet required for local power).

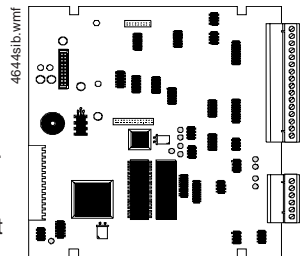


INA shown in ABS-4D Cabinet

## SIB-NET

The SIB-NET is a plug-in board which allows an AM2020 or AFP1010 control panel to connect to **NOTI•FIRE•NET™**. It plugs into the panel ICA-4L Interconnect Chassis Assembly.

- Plug-in module may be retrofitted into existing systems.
- Accepts one MIB series module.
- Two EIA-232 ports for CRT terminals, or EDP listed devices.
- Two EIA-232 ports for PRN printers, or EDP listed devices.
- EIA-485 port for ACS annunciators, LDM Series, LCD-80, AMG, etc.



SIB-NET

## NAM-232

The NAM-232 (NAM-232F for Fiber, NAM-232W for Wire medium) provides the ability to connect the AFP-200, AFP-300 and AFP-400 intelligent control panels to **NOTI•FIRE•NET™**.

### AFP-200 Network Interface Features:

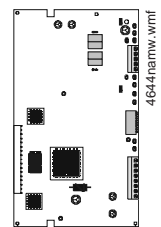
- Acknowledge, Signal Silence, System Reset from INA or NCS.
- Limited CCBE operation. *Cannot participate in clock synchronization.*
- Full network display.

### AFP-300/400 Network Interface Features:

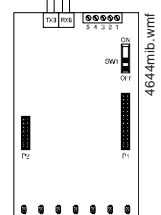
- Acknowledge, Signal Silence, System Reset from INA or NCS.
- Remote Annunciator Control from INA.
- Read status, control On/Off, and point enable/disable from INA or NCS.
- Limited CCBE operation. *Cannot serve as a synchronization master clock.*
- Full network display.

## MIB SERIES MEDIA INTERFACE BOARDS

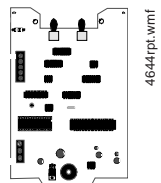
The MIB mounts "piggyback" onto the SIB-NET, INA or the NRT-NET module. It operates at 312K bits per second and provides full signal regeneration and amplification before passing information on to the next node. In combination with the panel software, it will support NFPA Style 4 or 7 configurations. It is available in three versions: **MIB-W** (wire), **MIB-F** (fiber), and **MIB-WF** (hybrid wire/fiber).



NAM-232W



MIB-WF



RPT-WF  
(see next page)

## RPT SERIES REPEATER MODULES

The RPT repeater is a single PC board that may be used to extend the distance of transmission. It may also be used to change media type between wire and fiber. The RPT may mount in the ABS-8R surface box, or in the CAB-3 or CAB-4 Series using one slot of the CHS-4 or CHS-4L. Available as **RPT-W** (wire), **RPT-F** (fiber), and **RPT-WF** (wire/fiber converter). Requires 24 VDC.

### SPECIFICATIONS

- **NCS Network Control Station**

See *NCS data sheet, DN-6869*.

- **INA Intelligent Network Annunciator**

See *INA data sheet, DN-5343*.

- **NAM-232 Network Interface Board**

See *NAM-232 data sheet, DN-5331*.

- **SIB-NET Serial Interface Board**

**NFN interface:** standard MIB slot.

**EIA-232 terminal ports (2):** 2,400 baud, isolated.

**EIA-232 printer ports (2):** 2,400 baud, isolated

**EIA-485 ACS port:** 20,833 baud, isolated.

**Size:** 8.0" x 8.0" (203.2 x 203.2 mm).

**Compatible panels:** AM2020, AFP1010.

- **MIB-W Media Interface Board**

**Data rate (bits per second):** 312,500.

**Maximum wire distance:** 3,000 feet (914.4 meters), two channels.

**Wiring type:** twisted pair.

**Wire size:** 14 AWG (2.0 mm<sup>2</sup>) to 18 AWG (0.75 mm<sup>2</sup>).

**Board size:** 3.5" (88.9 mm) x 5.0" (127.0 mm).

- **MIB-F Media Interface Board**

**Data rate (bits per second):** 312,500.

**Fiber distance:** 10 dB loss, two channels.

**Fiber type:** dual, Plenum grade.

**Fiber size:** 62.5 μm/125 μm; **wavelength:** 850 nM.

**Connector type:** ST®.

**Board size:** 3.5" (88.9 mm) x 5.0" (127.0 mm)

- **MIB-WF Media Interface Board**

**Specifications:** same as MIB-W plus MIB-F; one channel wire, one channel fiber.

- **RPT-W, RPT-F, RPT-WF Repeaters**

**Wire/fiber specifications:** same as MIB-W and MIB-F.

**Board size:** 4.4" (111.76 mm) x 6.5" (165.1 mm).

## NOTI•FIRE•NET™ VERSION 3.0

### ORDERING/COMPATIBILITY REQUIREMENTS

- The NCS must be version 4.1 or higher (**NOTI•FIRE•NET™** version 3.0 is compatible with the discontinued NCS version 1.0 and NCS version 4.1 or higher). To upgrade NCS version 1.0 to NCS 4.1 or higher, order **NCSKIT-NCW** (for wire) or **NCSKIT-NCF** (for fiber) and **NCSCDUG-US-4**.
- The NAM-232 (for AFP-200, AFP-300/400) firmware must be version 3.0. The NAM-232 comes with version 3.0 firmware.
- The SIB-NET (for AM2020/AFP1010) firmware must be version 3.0. The SIB-NET comes with version 3.0 firmware.
- **NOTI•FIRE•NET™** version 3.0 will not support ONYX® Series products (NFS-3030, NFS-640, NCA, NWS, or BACnet Gateway).
- See **NOTI•FIRE•NET™** Ordering Bulletin on **Magni-Fire.com**.

### AGENCY LISTINGS AND APPROVALS

All **NOTI•FIRE•NET™** equipment, including the NCS, INA, MIBs, NAM-232, and RPTs are listed by Underwriters Laboratories in file S635. Listings are for UL category UOJZ (Control Units System) and comply with UL standard 864 (control units for Fire-Protective Signaling Systems) and comply with UL 1076 (Proprietary Burglar alarm units and systems) UL 1610.

Certain software features described in this catalog sheet may not yet be included in this UL listing. Consult factory for latest listing status.

Listings for many other agencies are in process. Consult factory for latest listing status.

### ENGINEER/ARCHITECT SPECIFICATIONS

Complete specifications on **NOTI•FIRE•NET™** and **NOTIFIER's** complete line of fire alarm control and peripheral devices are available from NOTIFIER.

<http://www.notifier.com>