

August 19, 2004

DN-6971 • A0-110

**NOTI** • **FIRE** • **NET**<sup>™</sup>

Release 5.0

Section: Network Systems

# GENERAL

**NOTI** • **FIRE** • **NET**<sup>™</sup> 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.

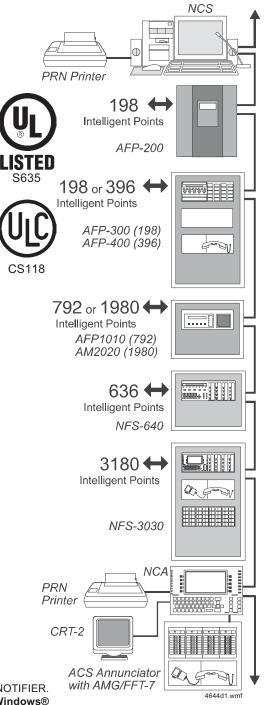
**NOTI** • **FIRE** • **NET**<sup>™</sup> (NFN) is a token-pass style network based on the proven ARCNET® local area network technology, with four million nodes installed worldwide. This computer LAN architecture makes NFN extremely powerful, yet simple to configure and install.

# **FEATURES**

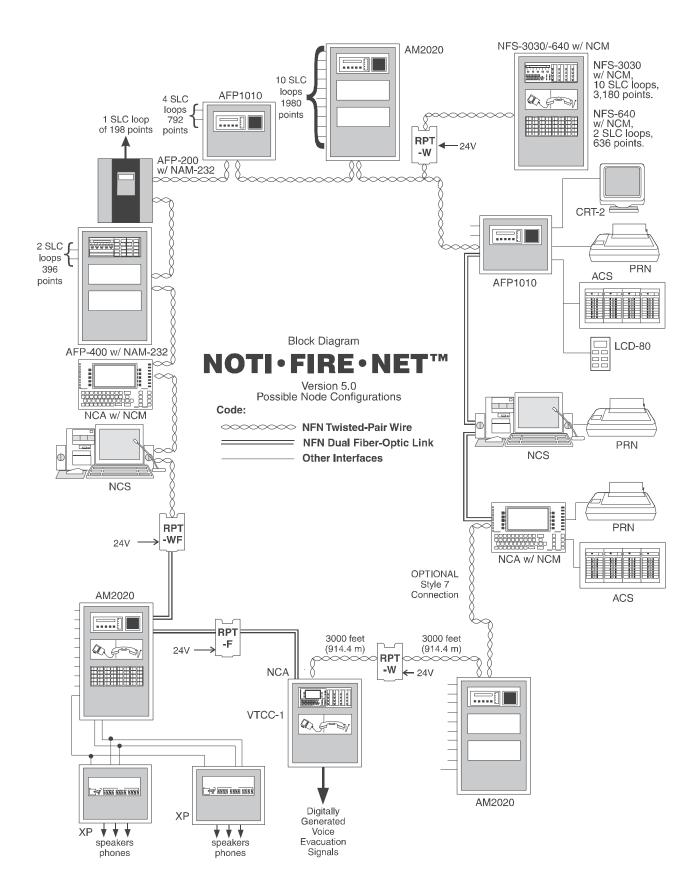
- Fiber optic (multi-mode), wire, or combination wire/fiber communications path.
- NFPA Style 4 or Style 7 network operation.
- Based on proven ARCNET® technology.
- True peer-to-peer communications. Each node stores its own program and communicates equally with all other nodes.
- Token-passing non-collision 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. The NAM-232 connects AFP-200, AFP-300, and AFP-400 panels anywhere on the network. The NCM connects the NFS-3030, NFS-640, NCA, BACnet Gateway, and NWS.
- Multiple Network Control Stations (ONYX® NCS) may be placed anywhere on the network. Additional ONYX® NCS's may be used to provide inherent "hot" backup.
- Multiple Network Control Annunciators (NCA) may be placed anywhere on the network. Version 5.0 does not support the INA.
- ONYX® Series NCS and NCA 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 NCA, ONYX® NCS, NFS-3030, NFS-640, 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.

**NOTI • FIRE • NET**<sup>™</sup> is a trademark and **ONYX**<sup>®</sup> is a registered trademark of NOTIFIER. **ARCNET**<sup>®</sup> is a registered trademark of Datapoint Corporation. **Microsoft**<sup>®</sup> and **Windows**<sup>®</sup> are registered trademarks of Microsoft Corporation. **Pentium**<sup>®</sup> & **Intel**<sup>®</sup> are registered trademarks of Intel Corporation. **ST**<sup>®</sup> is a registered trademark of AT&T Corporation.









# **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**<sup>™</sup>.

## PENTIUM-BASED COMPUTER (ONYX® NCS) features:

- Intel® 2.0 GHz Pentium® IV microprocessor.
- 256 KB cache memory, 256 MB RAM.
- 40 GB hard drive, 1.44 MB floppy drive, 24/10/40X CD-RW drive.
- 17" flat-screen LCD monitor, Windows® 2000 keyboard, P/S 2 mouse, 300 Watt power supply, sound card, microphone, and internal speakers.
- Microsoft® Windows® 2000.

## NCA NETWORK CONTROL ANNUNCIATOR

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

- 640-character, backlit LCD display shows all network alarms and troubles.
- LEDs for POWER, FIRE ALARM, PRE-ALARM, SECURITY, SUPERVI-SORY, SYSTEM TROUBLE, OTHER EVENT, SIGNAL SILENCED, POINT DISABLE, and CPU FAILURE.
- Fixed Function Keys/Switches for FIRE ALARM SCROLL/DISPLAY, SECU-RITY SCROLL/DISPLAY, SUPERVISORY SCROLL/DISPLAY, TROUBLE SCROLL/DISPLAY, OTHER EVENT SCROLL/DISPLAY, SIGNAL SILENCE, DRILL, AND SYSTEM RESET.
- Special Function Keys for DISABLE/ENABLE, PRINT SCREEN, LAMP TEST, NEXT SELECTION/PREVIOUS SELECTION, and RECALL LAST ENTRY.
- Alphanumeric QWERTY keypad with tactile and audible feedback.
- Nonvolatile real-time clock can be synchronized with network by master node.
- Nonvolatile History Buffer (200 Alarm events, 1,000 System events).
- Two optically-isolated EIA-232 ports for printer and CRT terminal.
- 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(B) hinged dress panel.
- An NCM is required for every NCA.
- · 24 VDC power from remote or local supply (CAB-3/-4 Series cabinet required for local power).

#### SIB-NET

The SIB-NET is a plug-in board which allows an AM2020 or AFP1010 control panel to connect to **NOTI** • **FIRE** • **NET**<sup>™</sup>. 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.

## 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**<sup>TM</sup>.

- AFP-200 Network Interface Features:
- Acknowledge, Signal Silence, System Reset from NCA or NCS.
- Limited CCBE operation. Cannot participate in clock synchronization.
- · Full network display.
- Limited CCBE operation. Cannot serve as a synchronization master clock.

System Reset from NCA or NCS.

· Acknowledge, Signal Silence,

disable from NCA or NCS.

AFP-300/400 Network Interface Features:

Remote Annunciator Control from NCA.

Read status, control On/Off, and point enable/

Full network display.

## **MIB SERIES MEDIA INTERFACE BOARDS**

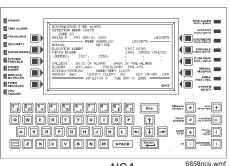
The MIB mounts "piggyback" onto the SIB-NET module. It operates at 312K bits per second and provides full signal regeneration and amplification before passing information on to the next node. In combination with the panel software, it will support NFPA Style 4 or 7 configurations. It is available in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

## **RPT SERIES REPEATER MODULES**

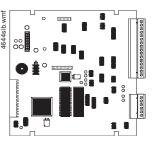
The RPT repeater is a single PC board that may be used to extend the distance of transmission. It may also be used to change media type between wire and fiber. The RPT may mount in the ABS-8R surface box, or in the CAB-3 or CAB-4 Series using one slot of the CHS-4 or CHS-4L. Available as **RPT-W** (wire),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



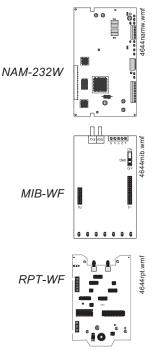
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SIB-NET



## **SPECIFICATIONS**

- ONYX® NCS Network Control Station See ONYX® NCS data sheet, DN-6869.
- NCA Network Control Annunciator See NCA data sheet, DN-6858.
- 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).

#### NCM-W Network Communications Module

See NCM-W and NCM-F data sheet, DN-6861. Compatible panels: NFS-640, NFS-3030.

• NCM-F Network Communications Module See NCM-W and NCM-F data sheet, DN-6861. Compatible panels: NFS-640, NFS-3030.

### • BACnet Gateway See BACnet Gateway data sheet, DN-6877.

• NWS NOTI • FIRE • NET<sup>™</sup> Web Server See NWS data sheet. DN-6928.

## NOTI·FIRE·NET<sup>™</sup> VERSION 5.0 ORDERING/COMPATIBILITY REQUIREMENTS

- The NCS must be version 4.0 or higher. To upgrade NCS version 1.0 to NCS version 4.0 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 5.0. To upgrade the NAM-232 for a version 5.0 network, order NROM-NAM5.0M.
- The SIB-NET (for AM2020/AFP1010) firmware must be version 5.0. To upgrade the SIB-NET for a version 5.0 network, order AROM5.0M-SIB.
- **NOTI**•**FIRE**•**NET**<sup>™</sup> version 5.0 will not support the INA.
- See NOTI•FIRE•NET<sup>™</sup> Ordering Bulletin on Magni-Fire.com.

# **AGENCY LISTINGS AND APPROVALS**

All **NOTI** • **FIRE** • **NET**<sup>™</sup> equipment, including the NCS, NCA, 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**<sup>™</sup> and **NOTI**-**FIER**'s complete line of fire alarm control and peripheral devices are available from NOTIFIER.

http://www.notifier.com