

General

The **Network Communications Module (NCM)** provides NOTIFIER's **NFS-640** Fire Alarm Control Panel and **NCA Network Control Annunciators** with a means to connect to **NOTI•FIRE•NET™**. Two types of NCM are available: **NCM-W** for connecting nodes with twisted-pair wire, and **NCM-F** for connecting nodes with fiber-optic cable.

NCM-W Features

- Supports twisted-pair wire medium.
- NFPA Style 4 (Class B) operation or NFPA Style 7 (Class A) operation.
- Two programmable data thresholds.
- Transformer coupling provides electrical isolation between nodes.
- Pluggable terminal wiring with strain relief.
- Pluggable service connector (feeds signal directly through) in the event that power must be removed from a node.
- 312.5 Kbaud transmission rate.
- Data is regenerated at each node.
- Two network ports to allow simultaneous connection to fire alarm control panel and to programming computer.
- Enables software and database upload/download over **NOTI•FIRE•NET™**.
- Repeaters are available to increase signal.
- Repeaters may be utilized to switch media type.
- Up to 3,000 feet (914.4 m) between nodes in a point-to-point fashion (actual distance varies with wire quality).

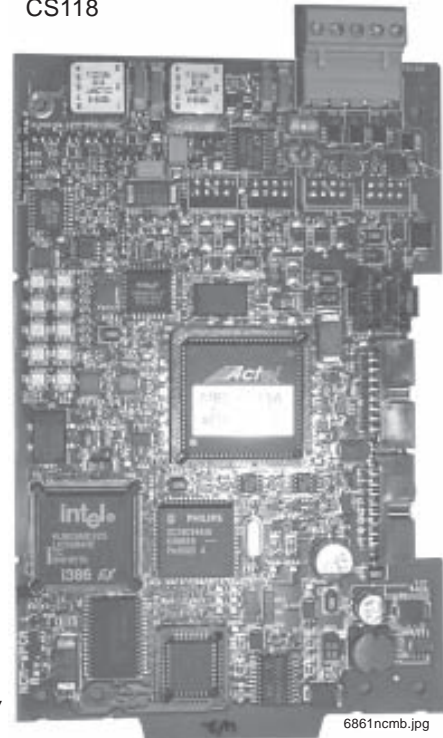
NCM-W Interconnections — When wiring consecutive NCM-W boards, wiring may enter or exit at Port A or Port B. NCM-W port-to-port wiring is not polarity sensitive; use of Port A or Port B is arbitrary. An NCM-W may be connected to any of the following devices: **MIB-W, MIB-WF, NAM-232W, NCM-W** (in another panel), **NCS-W** network connection, **RPT-W, RPT-WF**.

NCM-W Switch Functions — The NCM-W provides two sets of switches to simplify network setup. Enable **ground fault detection** by setting "ON" switch SW103 (Channel A); switch SW101 (Channel B). Activate **on-board end-of-line resistors** by setting "ON" switch SW100 (Channel A); switch 102 (Channel B). **NOTE: Correct configuration is dependent on network design; refer to the NOTI•FIRE•NET™ manual.**

For further information and diagrams, refer to the *NCM Installation Document*, 51533.

NCM-F Features

- Supports fiber-optic medium.
- NFPA Style 4 (Class B) or Style 7 (Class A) operation.
- Data is immune to all environmental noise.
- Optical isolation prevents ground loops.
- **NOTI•FIRE•NET™** fiber-optic medium.
- Fiber type: 62.5/125 micrometers (multimode); or 50/125 micrometers (multimode).


NCM-W

6861ncmb.jpg

- Maximum attenuation is 8 dB with 62.5/125 µm cable and 4.2 dB with 50/125 µm cable.
- Wavelength (1): 820 nanometers (use standard 850 nm fiber).
- Connectors: ST® style.
- 312.5 Kbaud transmission rate.
- Data is regenerated at each node.
- Two network ports to allow simultaneous connection to fire alarm control panel and to programming computer.
- Enables software and database upload/download over **NOTI•FIRE•NET™**.

NCM-F Interconnections — When wiring consecutive nodes/repeaters, fiber cable must exit one board on Transmit (TX) and enter the next node/repeater on Receive (RX). The fiber-optic pair (RX, TX) from Port A of one node/repeater may be connected to either Port A or Port B of another node/repeater. An NCM-F may be connected to any of the following devices: **MIB-F, MIB-WF, NAM-232F**, another **NCM-F, NCS-F** network connection, **RPT-F, RPT-WF**.

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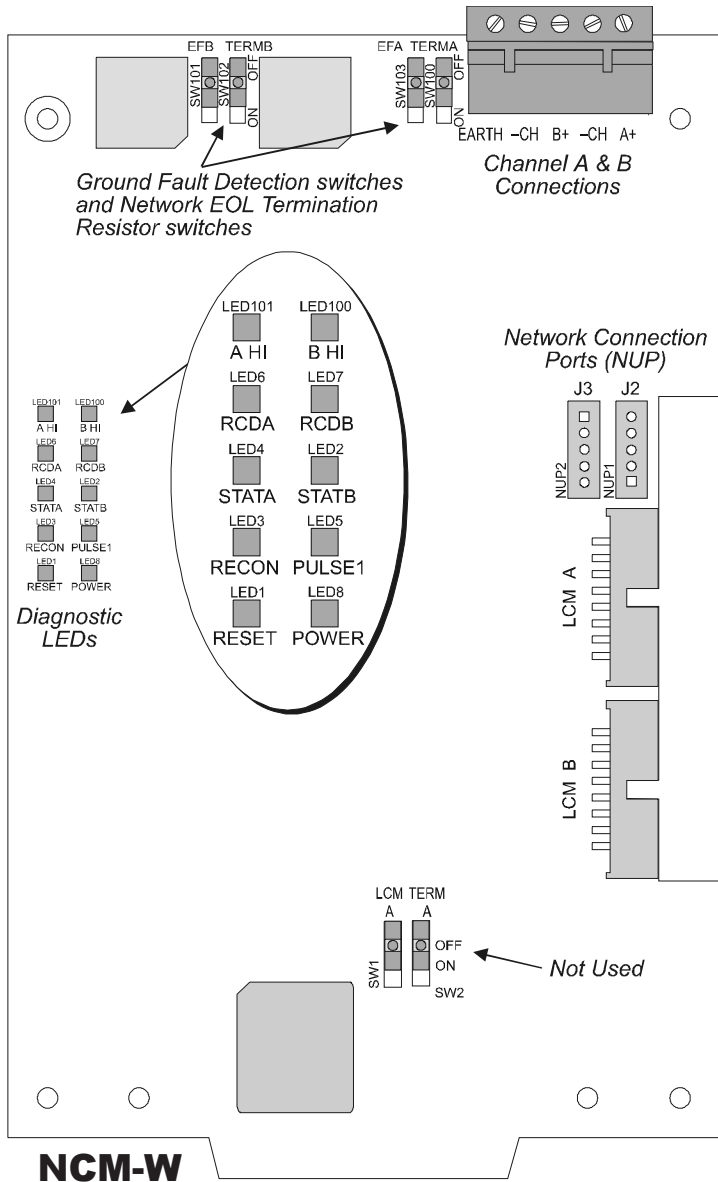
This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact **NOTIFIER**.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



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Made in the U.S.A.



Diagnostic LED Indicators

A HI (green): Illuminates to indicate the NCM-W Port A is set for high threshold (*NCM-W only*).

B HI (green): Illuminates to indicate the NCM-W Port B is set for high threshold (*NCM-W only*).

RCDA (green): Illuminates when the NCM is receiving data from **NOTI•FIRE•NET™** on Port A.

RCDB (green): Illuminates when the NCM is receiving data from **NOTI•FIRE•NET™** on Port B.

STATA (yellow): Illuminates when the NCM has not received valid data from **NOTI•FIRE•NET™** on Port A for at least 16 seconds.

STATB (yellow): Illuminates when the NCM has not received valid data from **NOTI•FIRE•NET™** on Port B for at least 16 seconds.

RECON (yellow): Illuminates when a reconfiguration on **NOTI•FIRE•NET™** is in progress.

PULSE1 (green): Illuminates when the NCM is transmitting **NOTI•FIRE•NET™** is in progress.

RESET (yellow): Illuminates when the microcontroller fails.

POWER (green): Illuminates when +5 VDC is available.

Product Line Information

NCM-W Network Communications Module, twisted-pair wire interface.

NCM-F Network Communications Module, fiber-optic cable interface.

Mixing Wire and Fiber on the Same Network

In some networks, it may be necessary to mix twisted-pair wire and fiber-optic cable. There are two solutions:

- **In any network**, an RPT-WF may be used as an interface between wire and fiber.
- **In a network that uses an AFP1010 or AM2020**, a MIB-WF may be used as the interface between wire and fiber.

Mounting

Both NCM-W and NCM-F can be installed in any panel output module position. Additionally, the NCM-W can be door-mounted on the ADP-4B dress panel on a single-space blank plate (BMP-1) for mounting in a CAB-4 Series cabinet.

NCM-F (detail)

