

Introducing the all new

# Napco Commercial Firewolf Series:

Robust, flexible 24V commercial fire systems supporting up to 255 zones/points using all-new fire devices in hardwire, wireless, conventional & addressable technologies



24V Analog Addressable, Wireless and Conventional Fire, 255, 128 or 32 point kits

**GEM-C Firewolf Series 24V Commercial Intelligent Analog Addressable Fire Panels, NFPA72-compliant**, 96 outputs, 4 onboard NACs (6.5A total), expandable to 24, built in Sync/Strobe/Horn Module (System Sensor & Wheelock) and dual line DACT plus optional TCP/IP reporting. Powerful battery capacity up to 32Ah total. More addressable devices than any in its class; mile-long loop lengths and more device load each. Cost-effective retrofits - supports conventional legacy devices & existing wiring (all types/gauges). Comprehensive local and remote programming & diagnostics. **Printable AHJ reports of analog device sensitivity settings with current readings (uploadable)**

- ✓ More zones/points – up to 255
- ✓ More power – 7 amps
- ✓ More NACs - 4 on board (expandable to 24)
- ✓ Built in strobe/horn sync
- ✓ More standby power
- ✓ 32 Amp hour battery capacity
- ✓ Regulated 24V output

**Code-compliant Integrated Security System Option** with Pre-Isolated Circuits & Power

**NAC Extender** provides nearly 7A and 4 onboard NACs with up to 2A ea; up to 24V 16Ah total battery capacity. Easily distributes synched bell and strobe outputs with built in module. Monitors AC, battery trouble, tamper and ground fault on Napco bus or provides universal FACP support.

**Regulated Auxiliary Power Supply** Commercial fire, 12V regulated 2A model

**Firewolf Advanced Analog Addressable Commercial Fire Devices** support auto-drift compensation and maintenance alert function

**Gemini-C New UL Commercial Wireless Line** with supervised tamper & automatic, continuously supervised signal strength (requires no manual test activation).

**Firewolf Menu-Driven Custom Alpha Keypads** Same familiar Napco ez-programming and usage. (Keyswitch support, too.)

**Compliances** - NFPA 72, UL Commercial Fire, UL864 9th Ed., UL985, CSFM and NYC Fire Department Certifications.



# Napco Commercial™ Firewolf-Series Components for 32 to 255 Point 24V Commercial Fire Systems:

## SYSTEM

- Main Control board supports up to two (2) Addressable Fire SLCs (addressable Signaling Line Circuit controllers). (*Note: Only 1 SLC is accommodated within the Medium panel enclosure.\**)
- Fire 4-wire bus for keypads and non-SLC (conventional) devices, including 12V devices
- Power Supply includes either 4A or 7A @ 24V
- RS-232 Printer Module for optional onsite parallel printer
- Supports up to 7 fire keypads, GEMC-FK1, mounted anywhere on the bus. (As few as one keypad required on system for equipment savings.)
  - Easy-to-use Gemini-style menu-driven operation with backlit custom alphanumeric display and functionality for Reset, Acknowledge, Silence (with disable).
  - Full Keyswitch Support
- Synch module built in on each NAC (System Sensor & Wheelock protocols)
- Dual Phone Line built in
  - 2 On board serial ports - one for internet reporting; one for high-speed local downloading
- TCP/IP Internet reporting module
- Regulated Auxiliary Power Supply - Commercial fire, 12V regulated 2A
- Addressable SLC Loop Isolator (*optional use* - for some fire applications requiring increased circuit integrity, e.g., meets Class A, Style 7 loop requirements.
- **Choice of two enclosures** - Between the studs enclosures, recess or surface mount -
  - Larger version supports up to 32 AH at 24V. Dimensions: 24" x 14.25" x 5.2" (H x W x D) without cover. Removable battery shelves, accommodate pairs of 7Ah, 7.5Ah and 8Ah batteries, etc.
  - Medium Enclosure - supports 16 AH at 24V. Dimensions: 16" x 14.25" x 5.2" (H x W x D) without cover. (*\*Note: Only 1 SLC is accommodated.*) 16Ah battery backup capacity.

## INPUTS

### Up to 255 Zones. Zones can come from any of the following initiating devices:

- Addressable SLC Loop - supports up to (2) 126 point loops
- Commercial RF Receiver -
- Supports Commercial Wireless Fire devices
  - Wireless Smoke Detector Model GEMC-WL-SMK
  - Wireless Heat Detector Model GEMC-WL-HEAT
  - Wireless contact transmitter (for waterflow, tamper, pull stations, etc.) Model GEMC-WL-WD2.
- Conventional 1- to 4-zone EZM Expansion modules on the 4-wire fire bus or SLC loops
- Conventional 2-wire or 4-wire smoke detector input module
- SLC Fire Devices Supported:
  - Analog Smoke Detector
  - Analog Heat Detector
  - Duct Detector
  - Pull Station
  - Conventional Zone Module
  - Short Circuit Isolator

## OUTPUTS

### Up to 96 outputs

- Four on board Class B or 2 Class A NAC circuits, 2 amps each, total 6.5 amps at 24V
- Built in Wheelock and System Sensor NAC sync/strobe/horn protocol allows initial silence of audible appliances while maintaining visual notification, *without the use of additional modules.*
- Addressable SLC Fire Devices: Supervised relay, unsupervised relay
- Fire 4-wire bus devices: 8 zone form C relay (GEMC-RM3008), 8 open collector output (GEMC-OUT8)

## Advantages

- **Easy Wire Compatibility** - Addressable SLC controller supports shielded, unshielded, twisted and untwisted wire - ideal for retrofits
- **Longer SLC loop lengths, support more device loads each, too** (see below for distance at maximum device load in alarm/standby each):
  - 10,000 ft. #14AWG • 6,200 ft. #16AWG • 4,000 ft. #18AWG
- **Support for Legacy and Existing Notification Appliances** - One NAC output configurable for 12V for easy retrofit compatibility
- UL Regulated NAC outputs
- **Automatic drift compensation** for SLC smoke detectors
- Keypads mount anywhere on the bus and have flash-able firmware - for updates via Quickloader command (# GEMC-FK1, shown above)
- **Programmable obscuration level** by smoke detector device
- **Smoke Obscuration Report generated remotely or locally or in any of 3 ways** - Quickloader device sensitivity report allows the printout of a report for the AHJ listing the current status of all smoke detectors in the system including the programmed obscuration level and the actual sensitivity reading for each device. This report can be generated remotely (uploaded) or locally through notebook PC or use optional onsite printer.
- **Full line of UL Commercial Devices for more flexibility & labor-savings** Example, Use Gemini Commercial Wireless 2-input module (GEMC-WL-WD2) to convert any UL listed fire device into a UL wireless device, ideal for sprinkler supervisories or for use with pull stations (mounts on top of wall/conduit or in deep single-gang box (plastic).
- **Separate 7Amp 4-NAC Extender (GEM-NAC7)** 4 onboard NACs with up to 2A ea., expandable for up to 24 per system. Up to 28Ah total battery capacity. Regulated 24V Aux. power. Monitors AC, battery trouble, tamper and ground fault on Napco bus - *Also Provides Universal FACP support for easy standardization in upgrades*

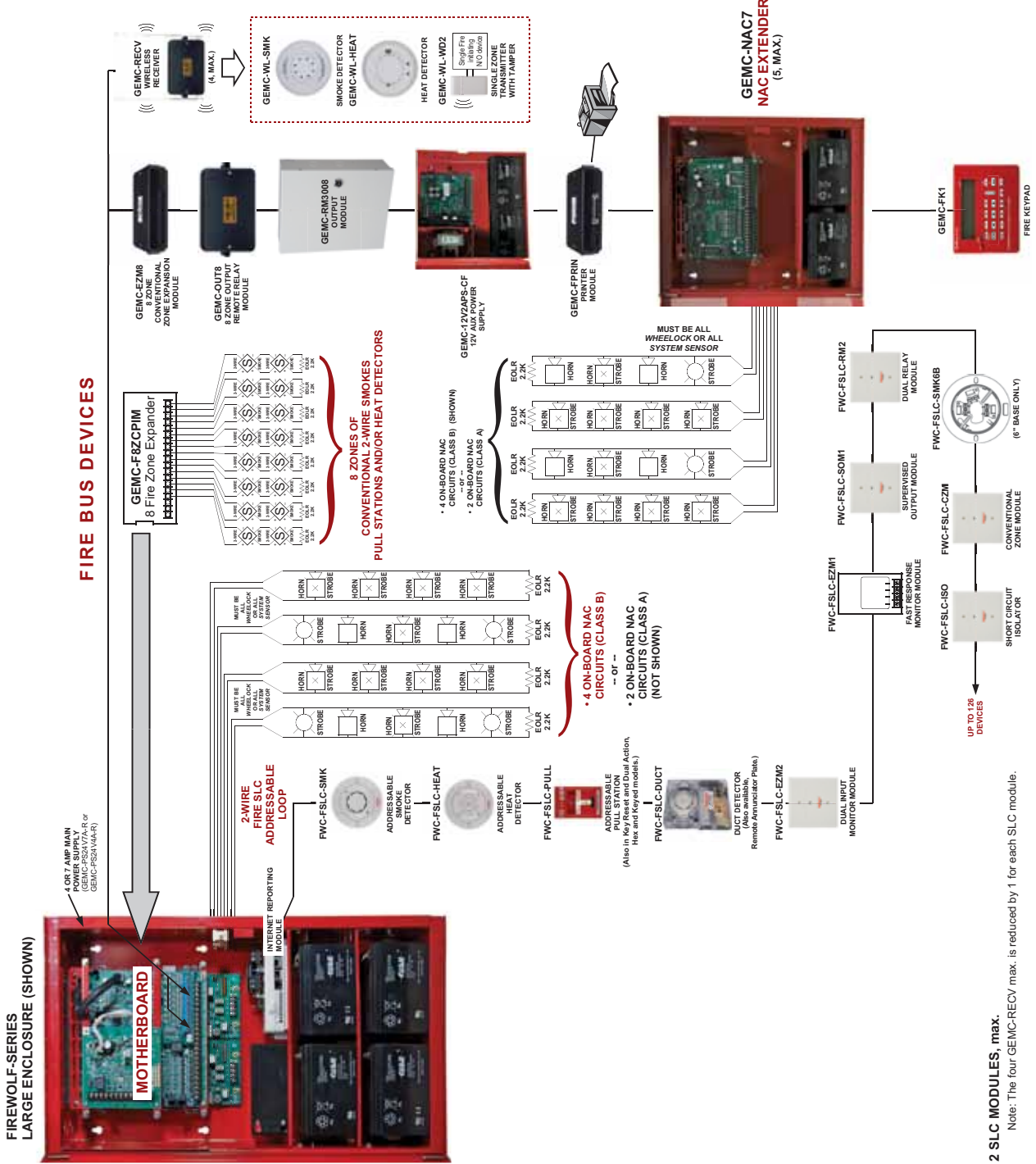


(Shown above)  
32-Point GEM-C Firewolf™ 24V Commercial Fire System

## Agencies

NFPA 72, UL Commercial Fire, UL864 9th Ed., UL985, CSFM and NYC Fire Department Certifications.

## FIREWOLF SYSTEM COMPONENTS



# NAPCO COMMERCIAL FIREWOLF SERIES SYSTEM ORDERING INFO.

## Napco Commercial Fire Kits

<b>GEMC-FW-255KT</b>	<b>255 Point GEM-C Firewolf™ 24V Commercial Fire System Kit</b> <ul style="list-style-type: none"> <li>• 24V Panel, 255 Points via commercial addressable, wireless or conventional fire devices, 4 on board NACs providing up to 6.5A notification power</li> <li>• 7 Amp, 24V Power Supply</li> <li>• Built in horn/strobe synch. module on each NAC</li> <li>• Built in dual line communicator; dual onboard serial ports</li> <li>• Quickloader up/downloading including remote smoke obscuration reporting</li> <li>• Locking, Large Red Enclosure, 16 x 25" reversible door, with 14.25" x 25" base. Houses up to 32Ah battery backup.</li> <li>• Menu-driven LCD Fire Keypad mounts anywhere on bus. (Also, full keyswitch support)</li> </ul>
<b>GEMC-FW-128KT</b>	<b>128 Point GEM-C Firewolf™ 24V Commercial Fire System Kit</b> <i>As above, but with</i> <ul style="list-style-type: none"> <li>• 24V Panel, 128 Points via commercial addressable, wireless or conventional fire devices, 4 on board NACs providing up to 6.5A notification power</li> </ul>
<b>GEMC-FW-32KT</b>	<b>32 Point GEM-C Firewolf™ 24V Commercial Fire System Kit</b> <i>Similar to above, but with</i> <ul style="list-style-type: none"> <li>• 24V Panel, 32 Points via commercial addressable, wireless or conventional fire devices, 2 on board NACs providing up to 4A notification power</li> <li>• Locking, Medium Red Enclosure, 16 x 17" door, with 14.25" x 16" base. Houses up to 16Ah battery backup.</li> </ul>
<b>GEMC-FW32CONVKT</b>	<b>32 Point GEM-C Conventional Commercial Fire System Kit, ideal for sprinkler/waterflow apps.</b> 24V Panel, 32 Points via commercial addressable, wireless or conventional fire devices, 4 on board NACs providing up to 6.5A notification power <ul style="list-style-type: none"> <li>• Locking, Medium Red Enclosure, 16 x 17" door, with 14.25" x 16" base. Houses up to 16Ah battery backup.</li> <li>• 4 Amp, 24V Power Supply</li> <li>• Conventional 8-zone 2-wire fire input module, for conventional 2-wire smokes or any conventional fire detection device (GEMC-F8ZCPIM)</li> <li>• Built in horn/strobe synch. module on each NAC</li> <li>• Built in dual line communicator; dual onboard serial ports</li> <li>• Quickloader up/downloading including remote smoke obscuration reporting (for addressable detectors)</li> <li>• Menu-driven LCD Fire Keypad mounts anywhere on bus (GEMC-FK1)</li> </ul>

## Conventional Fire System Peripherals

<b>GEMC-FK1</b>	<b>LCD Fire Red Keypad</b> (Menu-driven operation, functionality for Reset, Acknowledge, Silence (with disable).
<b>GEMC-F8ZCPIM</b>	<b>Conventional 8-zone 2-wire fire input module.</b> Plugs into motherboard, for conventional 2-wire smoke detectors or any conventional fire detection device.
<b>GEMC-EZM8</b>	<b>8-point Expansion Module</b>
<b>GEMC-NL-MOD</b>	<b>Internet Reporting Module</b>

## Wireless Firewolf Peripherals

<b>GEMC-WL-SMK</b>	Gemini Commercial <b>Wireless Smoke</b> , Photoelectric (complete).
<b>GEMC-WL-HEAT</b>	Gemini Commercial <b>Wireless Heat</b> , 135° F
<b>GEMC-WL-WD</b>	Gemini Comm'l <b>Wireless slim profile</b> 1-input wireless module
<b>GEMC-WL-WD2</b>	Gemini Comm'l <b>Wireless 2-input module</b> converts any UL listed device into a UL wireless device (ex., pull stations or sprinkler supervisories.)
<b>GEMC-REVC</b>	Gemini Commercial <b>Wireless 255 point RF Receiver</b> (up to 4 per system, max.)

## Addressable Firewolf Peripherals

<b>GEMC-FW-SLC</b>	<b>Addressable SLC Fire Module</b> , supports up to 128 addressable SLC fire devices, below. Up to 2 connect to Panel.
<b>FWC-FSLC-SMK</b>	Addressable <b>Analog SLC Smoke</b> , photoelectric, head**
<b>FWC-FSLC-HEAT</b>	Addressable <b>Analog SLC Heat</b> , 135°F, head**
<b>FWC-FSLC-DUCT</b>	Addressable <b>SLC Duct</b> smoke detector, photoelectric
<b>FWC-FSLC-DUCTRA</b>	<b>Remote Indicator Plate</b> with LED indicator & key reset.
<b>FWC-FSLC-EZM2</b>	Addressable <b>SLC 2-zone conventional expansion</b> module. Uses one address on SLC loop, but yields 2 indep. contact monitoring circuits, for pull stations, water flow and other dry contact alarm initiating devices.
<b>FWC-FSLC-EZM1</b>	Addressable <b>SLC 1-input conventional</b> module, similar to usage above.
<b>FWC-FSLC-CZM</b>	Addressable <b>SLC single module</b> , for monitoring of dry contacts, i.e., pull stations and conv. smokes
<b>FWC-FSLC-RM2</b>	Addressable <b>SLC 2-output module</b> (requires 1 SLC address)
<b>FWC-FSLC-ISO</b>	Addressable <b>SLC Short Circuit Module</b> (Optional: For special applications, meets Class A, Style 7 loop reqts.)
<b>FWC-FSLC-SOM1</b>	Addressable <b>SLC Fire supervised output module.</b> Application examples: elevator recall, HVAC shutdown, add'l NAC output w/ power supply
<b>FWC-FSLC-PULL</b>	Addressable <b>SLC Fire Pull Station</b> , standard hex-key reset.
<b>FWC-FSLC-PULLK</b>	Version of above, with <b>key reset.</b>
<b>FWC-FSLC-PULL2</b>	<b>Dual action pull station</b> , with hex-key reset.
<b>FWC-FSLC-PULL2K</b>	<b>Dual action, with key</b> reset.
<b>FWC-FSLC-PROG2</b>	<b>Tool for address-programming</b> SLC devices
<b>FWC-FSLC-SMK6B</b>	** <b>Smoke/Heat 6" Base</b> , required for FWC-FSLC- SMK and -HEAT devices

## Output Options

<b>GEMC-NAC75</b>	<b>Remote 4-output NAC Extender</b> , for 6.5A ttl, or 2A, max. on any 1 output. Red 14 x 16" can, connects to 120VAC, supports 24V 28Ah standby batts. Supervised, fire bus connection. System Sensor and Wheelock NAC synch. (5/system, for 20 add'l NAC circuits ttl.)
<b>GEMC-12V2APS-CF</b>	<b>12VDC Power Supply for Fire Bus</b> , remote supervised. Direct 120VAC connection, supports 2ea. 12V, 7Ah to 18Ah standby batts.
<b>GEMC-FPRINT</b>	Parallel <b>Printer Module</b>
<b>GEMC-RM3008</b>	<b>8 Form C Relay Output</b> Module
<b>GEMC-RS232</b>	<b>RS232 Adapter</b> for serial output from Panel
<b>GEMC-OUT8</b>	<b>PGM Output Module</b> , 8 open collector PGM outputs



NAPCO Security Technologies, Inc.  
 www.napcosecurity.com  
**1-800-645-9445 • 631-842-9400**  
 Amityville, NY USA



## **NAPCO SECURITY TECHNOLOGIES, INC.**

333 Bayview Avenue, Amityville, New York, U.S.A. 11701

800-645-9445 (631) 842-9400 FAX (631) 842-9137

## **New GEMC Features and Accessories Supported by Version 83A6 (V83A6) & Quickloader V6.03 or greater**

The following is a summary of new Gemini Commercial Platform features and accessories supported by GEMC firmware version 83A6 that have been approved by UL and are now available. These improvements are the direct result of requests from customers and AHJ's across the country.

### **New GEMC Features:**

#### **Horn/Strobe Simultaneous Silence**

Added the programmable option to silence STROBES AND HORNS of Smart NAC appliances together with one push of the SILENCE button, which allows compliance with NFPA 2007 and 2010. This is a global feature and applies to all SMART NAC circuits, including those on the NAC Extender, GEMC-NAC7S. Enable using Direct Address Program Mode at address 7952 option 5 or program using PCD-Windows QuickLoader in the NAC Output Assignment / NAC Output-Options tab.

#### **Keypad 1 Always Unlocked for User Functions**

When enabled, Fire Keypad #1 remains unlocked continually, allowing ALL User functions to be executed on Fire Keypad #1. These "User functions" include Fire system tasks such as acknowledging, resetting and silencing alarms, but do not include control panel programming changes. Enable using Direct Address Program Mode at address 7952 option 7 or program using PCD-Windows QuickLoader in the Keypad Assignment screen, Keypad Features tab.

#### **Single Button Supplemental Reset**

Added the ability to press and HOLD the "0" key to reset the SUPPLEMENTAL OUTPUT relays - this allows for a one button push to reset these outputs, which has been requested by AHJ's who want single button presses to control key features. Silence and Reset are already single button but normal resetting of Supplemental Relays requires the user to enter the User Menu and scroll down to the "Reset Supplemental Relay" selection and then press a button. The GEMC-FK1 keypad firmware version 1C has been modified to allow a hold down of a "0" to be execute the same command as the menu selection of "reset supplemental Relay". This feature is not programmable; it is available anytime the keypad is unlocked.

#### **All Keypads Unlocked for Silence, Reset & Supplemental**

When enabled, the SILENCE and RESET keys and the Supplemental Relay Reset key function (pressing and holding the zero keypad key) are continually enabled all Fire keypads. Enable using Direct Address Program Mode at address 7952 option 8 or program using PCD-Windows QuickLoader in the Keypad Assignment screen, Keypad Features tab.

#### **Coded Cadence 4 Cycles only**

When enabled, the number of repeated coded cadence alarm patterns is limited to 4 cycles (imitating coded boxes that only had enough spring capacity to turn the coded wheel 4 times). Enable using the

keypad Direct Address Program Mode at address 5327 option 1 or program using PCD-Windows QuickLoader in the NAC/Output Assignment screen, NAC/Output Options tab.

### **Unattended Download Mode**

When enabled, allows unattended downloading from a computer for Fire Alarm installations using PCD-Windows QuickLoader software. This feature is enabled ONLY by (keypad) Direct Address Program Mode by an authorized Dealer, regardless of the Remote Downloading Rules (located in WI1673 Volume 1) and CANNOT be overridden by QuickLoader. This feature is disabled by default, and will not trigger an "Error Check Required" (E28) trouble message when enabled. Enable using Direct Address Program Mode by pressing "1" at address 8163. To inform the Dealer if this option was enabled via the keypad, PCD-Windows QuickLoader (in the Keypad Assignment screen, Keypad Features tab) contains a nonfunctional "Unattended Download Mode" checkbox that is checked when enabled and grayed-out when disabled.

### **Disable Panel Error Check Required Mode**

Allows the dealer to choose to require a QuickLoader error check be performed after programming the control panel. Enable using Direct Address Program Mode at address 5326 option 6 (enter a "1") or program using PCD Windows QuickLoader in the Keypad Assignment screen, Keypad Features tab. For more information, see the Fire Glossary located in WI1653 volume 2.

## **New GEMC Accessories:**

### **GEMC-KEYSWKIT Keyswitch Kit Option**

To be used in cases where it is required that a keyswitch be used to unlock the fire keypad. The GEMC-KEYSWKIT consists of an easy-to-install keypad / keyswitch mounting box that allows codeless locking and unlocking of the Napco GEM-FK1 Fire alarm keypad. The GEMC-KEYSWKIT is designed to be mounted to a one, two or three-gang electrical box, or to a hollow wall using mounting hardware appropriate for the mounting surface. The keyswitch is wired into one of two existing GEMC-FK1 keypad inputs; when the key is inserted and rotated, the keyswitch closes, triggering a keypad command to the control panel to unlock that keypad.

This feature may be configured to allow either a maintained or momentary keyswitch closure to unlock the keypad for a 15 minute period OR a maintained keyswitch closure which will unlock the keypad when opened will lock the keypad when closed

### **GEMC-LOCK-CAT30 Key-Alike Option**

To be used in cases where it is required that the same key used to reset the pull stations also be used to unlock the control panel enclosure. Simply replace the standard enclosure lock with the GEMC-LOCK-CAT30 to "key alike" the pull station and enclosure lock. Note - the GEMC-KEYSWKIT, above is also keyed to CAT 30, allowing one key to unlock the keypad, reset the pull stations and open the GEMC control panel enclosure.

### **FN-CTM City Tie Module Option**

The FN-CTM is a City Tie Module used to connect the GEMC Fire Alarm Control Panel to a Local Energy type City Tie Monitoring circuit. The FN-CTM City Tie Module circuit provides the power necessary to trip the Master Box Trip Coil when the Fire Alarm Control Panel goes into alarm.

The City Tie Circuit is capable of providing 1A for 0.5 seconds to operate the Master Box Trip Coil. The wiring is supervised to the Master Box by placing the EOL resistor device on the terminals of the FN-CTM City Tie Module.