



# Firewolf™ 24V Commercial Fire Systems & Cell/IP Communications



**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)
- ✓ Onboard strobe/horn sync
- ✓ More standby power
- ✓ 32 Amp hour battery capacity
- ✓ Regulated 24V output

**Compliances** - NFPA 72, UL Commercial Fire, UL864, UL985, CSFM and NYC FD

**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

**UL Commercial Grade Gemini Wireless Devices** with supervised tamper & automatic, continuously supervised signal strength (requires no manual test activation).

**Firewolf Menu-Driven Custom Alpha Annunciators** Same familiar Napco EZ-programming and usage. (Keyswitch support, too.) Customizable Quick-Start Preset Program & Auto-Learn of SLC Devices.

**Code-compliant Integrated Security & Access Control Option** Pre-Isolated Circuits & Power Customizable Quick-Start Preset Program & Auto-Learn of SLC Devices & Modular Access Control option.

**StarLink Fire Universal Sole & Dual Path Fire Cellular &/or IP LTE Communicators** Work with virtually any 12V-24V FACP. Connected by Verizon® LTE Network or AT&T® LTE Network, for secure, fast reporting on Nation's fastest, most cyber-

protected multibillion dollar networks. Panel Powered Technology™ (powered by panel), Patented Signal Boost & Dual Diversity Antennae™ for maximum signal acquisition and null avoidance, receiving signals simultaneously on both antennae. Models meet or exceed today's codes, UL864 and NFPA72, etc.

**FireLink™ Integrated Fire Alarm Control Panel w/ StarLink Fire LTE Built In** Firewolf 8 Zone 24V Conventional Commercial Fire Alarm Control Panel with onboard StarLink Fire® Sole Path, Verizon LTE Cellular Alarm Communicator and integral menu-driven LCD annunciator, w/ 4amp, 24V power supply. Optionally expandable up to 32 points/zones via commercial addressable, wireless or conventional fire devices (2 onboard NACs providing up to 4A notification power). Locking, mercantile red enclosure, (surface or flush mount) removable 16"x17" door with 14.25"x16" base. Houses 16Ah battery backup

**NAC Extender** provides nearly 7A and 4 onboard NACs with up to 2A ea; up to 24V 16Ah total battery capacity. Easily distributes synced bell and strobe outputs with built in module.

# Napco Firewolf Series Components for 32

## 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 annunciators 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 annunciators, GEMC-FK1, mounted anywhere on the bus. (As few as one annunciator 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
- Onboard sync and smart operation support for System Sensor and Wheelock Notification Devices.
- 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
- Onboard 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**
- Annunciators 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 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 16Ah total battery capacity. Regulated 24V Aux. power. Monitors AC, battery trouble, tamper and ground fault on Napco bus. 3 Programmable relay outputs; 2 low voltage; 1 high-voltage 120V rated relay. - Also Provides Universal FACP support for easy standardization in upgrades



## Agencies

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

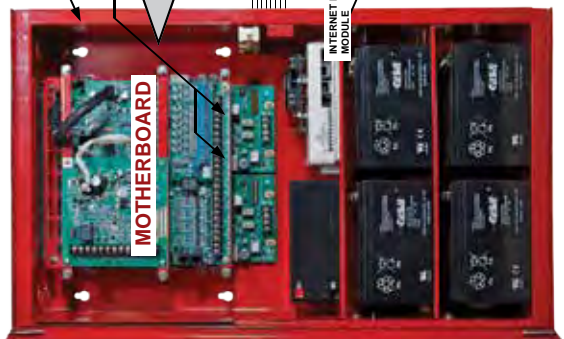


### FireLink™ Integrated Fire Alarm Control Panel w/ StarLink Fire LTE Built In

**FL-FACP-LTEVS** Firewolf 8 Zone 24V Conventional Commercial Fire Alarm Control Panel with onboard StarLink Fire® Sole Path, Verizon LTE Cellular Alarm Communicator and integral menu-driven LCD annunciator, w/ 4amp, 24V power supply. Optionally expandable up to 32 points/zones via commercial addressable, wireless or conventional fire devices (2 onboard NACs providing up to 4A notification power). Locking, mercantile red enclosure,(surface or flush mount) removable 16"x17" door with 14.25"x16" base. Houses 16Ah battery backup.  
**Compliances:** UL864, UL 1635 & NFPA 72 Editions 2016, 2013, 2010, 2007 code, CSFM, NYCFD

# to 255 Point 24V Commercial Fire Systems:

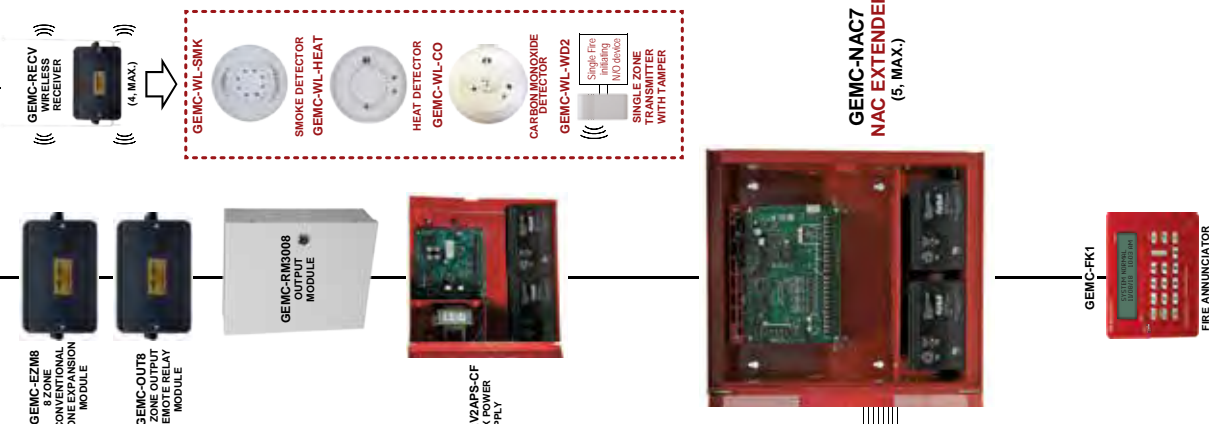
## FIREWOLF-SERIES LARGE ENCLOSURE (SHOWN)



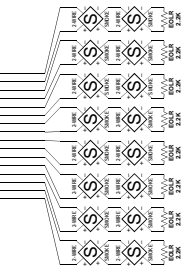
**MOTHERBOARD**

4 OR 7 AMP MAIN POWER SUPPLY (GEMC-FS24V7A-R or GEMC-FS24V4A-R)

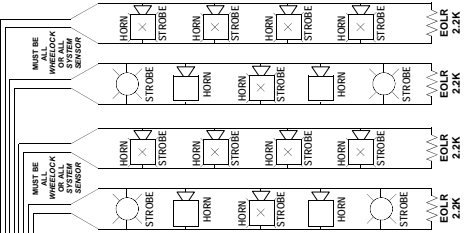
## FIRE BUS DEVICES



**GEMC-F8ZCPIM**  
8 Fire Zone Expander



8 ZONES OF CONVENTIONAL 2-WIRE SMOKES PULL STATIONS AND/OR HEAT DETECTORS



4 ON-BOARD NAC CIRCUITS (CLASS B) (SHOWN)  
2 ON-BOARD NAC CIRCUITS (CLASS A)

4 ON-BOARD NAC CIRCUITS (CLASS B) - or -  
2 ON-BOARD NAC CIRCUITS (CLASS A) (NOT SHOWN)

2-WIRE FIRE SLC ADDRESSABLE LOOP

FWC-FSLC-SMK ADDRESSABLE SMOKE DETECTOR

FWC-FSLC-HEAT ADDRESSABLE HEAT DETECTOR

FWC-FSLC-PULL ADDRESSABLE PULL STATION (Also in Hex and Keypad models)

FWC-FSLC-DUCT DUCT DETECTOR (Also available Remote Annunciator Plate)

FWC-FSLC-EZM2 DUAL INPUT MONITOR MODULE

FWC-FSLC-EZM1 FAST RESPONSE MONITOR MODULE

FWC-FSLC-SOM1 SUPERVISED OUTPUT MODULE

FWC-FSLC-RM2 DUAL RELAY MODULE

FWC-FSLC-CZM CONVENTIONAL ZONE MODULE

FWC-FSLC-ISO ISOLATOR

FWC-FSLC-DUCTRA REMOTE ANNUNCIATOR PLATE

FW2 PHOTOELECTRIC SMOKE DETECTOR

GEMC-FK1 FIRE ANNUNCIATOR

UP TO 126 DEVICES

Note: The four GEMC-REC7 max. is reduced by 1 for each SLC module.

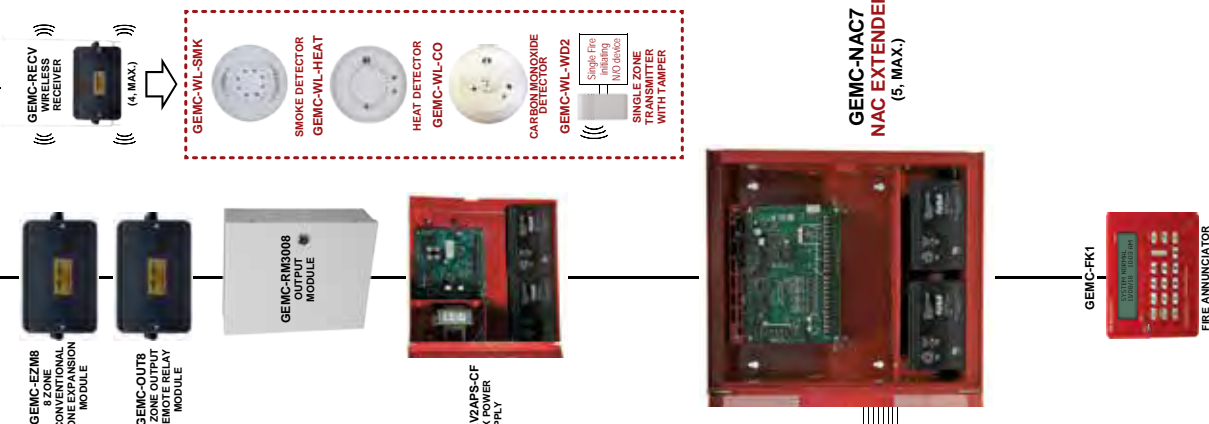
## FIREWOLF-SERIES 32-POINT GEM-C FIREWOLF™ 24V COMMERCIAL FIRE SYSTEM



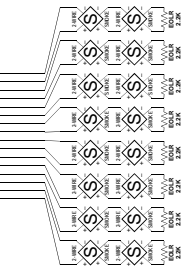
**MOTHERBOARD**

4 OR 7 AMP MAIN POWER SUPPLY (GEMC-FS24V7A-R or GEMC-FS24V4A-R)

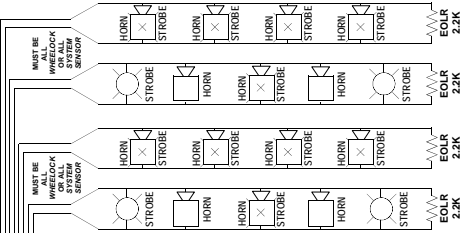
## FIRE BUS DEVICES



**GEMC-F8ZCPIM**  
8 Fire Zone Expander



8 ZONES OF CONVENTIONAL 2-WIRE SMOKES PULL STATIONS AND/OR HEAT DETECTORS



4 ON-BOARD NAC CIRCUITS (CLASS B) (SHOWN)  
2 ON-BOARD NAC CIRCUITS (CLASS A)

4 ON-BOARD NAC CIRCUITS (CLASS B) - or -  
2 ON-BOARD NAC CIRCUITS (CLASS A) (NOT SHOWN)

2-WIRE FIRE SLC ADDRESSABLE LOOP

FWC-FSLC-SMK ADDRESSABLE SMOKE DETECTOR

FWC-FSLC-HEAT ADDRESSABLE HEAT DETECTOR

FWC-FSLC-PULL ADDRESSABLE PULL STATION (Also in Hex and Keypad models)

FWC-FSLC-DUCT DUCT DETECTOR (Also available Remote Annunciator Plate)

FWC-FSLC-EZM2 DUAL INPUT MONITOR MODULE

FWC-FSLC-EZM1 FAST RESPONSE MONITOR MODULE

FWC-FSLC-SOM1 SUPERVISED OUTPUT MODULE

FWC-FSLC-RM2 DUAL RELAY MODULE

FWC-FSLC-CZM CONVENTIONAL ZONE MODULE

FWC-FSLC-ISO ISOLATOR

FWC-FSLC-DUCTRA REMOTE ANNUNCIATOR PLATE

FW2 PHOTOELECTRIC SMOKE DETECTOR

GEMC-FK1 FIRE ANNUNCIATOR

UP TO 126 DEVICES

Note: The four GEMC-REC7 max. is reduced by 1 for each SLC module.

## 2 SLC MODULES, max.



GEMC-REC7 NAC EXTENDER (5, MAX.)

Note: The four GEMC-REC7 max. is reduced by 1 for each SLC module.



# Firewolf 24V Commercial Fire Systems & Cell/IP Communications Ordering:

## 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 sync. module on each NAC</li> <li>• Built in dual line communicator; dual onboard serial ports</li> <li>• SLC Loop Card included.</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 Annunciator mounts anywhere on bus. (Also, full keypad support)</li> </ul>
<b>GEMC-FW-128KT</b>	<b>128 Point GEM-C Firewolf™ 24V Commercial Fire System Kit</b> As above, but with <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. SLC Loop Card included. (Second SLC Loop Card is optional.)</li> </ul>
<b>GEMC-FW-32KT</b>	<b>32 Point GEM-C Firewolf™ 24V Commercial Fire System Kit</b> Similar to above, but with <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. SLC Loop Card included. (Second SLC Loop Card is optional.)</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 sync. 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 Annunciator mounts anywhere on bus (GEMC-FK1)</li> </ul>
<b>FL-FACP-LTEVS</b>	<b>8 Zone Preprogrammed Firewolf FACP w/ integrated StarLink Fire® LTE Cell Communicator &amp; LCD annunciator</b> Similar to above, but with <ul style="list-style-type: none"> <li>• FACP pre-programmed for 8 conventional zones, with onboard LTE Cellular Communicator and on-door Annunciator</li> <li>• Unique StarLink LTE dual diversity precision twin antennae design &amp; Signal Boost™ circuitry ensure greater range &amp; reliability, maximizing signal acquisition and null-avoidance, receiving signals simultaneously on both antennae</li> <li>• Optionally expandable up to 32 Points /Zones via commercial addressable, wireless or conventional fire devices (2 on board NACs providing up to 4A notification power).</li> <li>• Locking, Mercantile Red Enclosure, (surface or flush mount) with menu-driven annunciator on door</li> </ul> * Note: For flush mount applications, use external antenna (see SLE-ANTEXT75, below)
<b>CONVENTIONAL FIRE SYSTEM PERIPHERALS</b>	
<b>GEMC-FK1</b>	<b>LCD Fire Red Annunciator</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>FWC-CNV-PULL</b>	Conventional Single Action Pull Station, with Hex Reset
<b>FWC-CNV-PULLK</b>	Conventional Single Action Pull Station, with Key Reset
<b>FWC-CNV-PULL2</b>	Conventional Dual Action Pull Station, with Hex Reset
<b>FWC-CNV-PULL2K</b>	Conventional Dual Action Pull Station, with Key Reset
<b>WIRELESS FIREWOLF PERIPHERALS</b>	
<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-WD2</b>	Gemini Commercial <b>Wireless Input Module</b> converts any UL listed device into a UL wireless device (ex., pull stations or sprinkler supervisories.)
<b>GEMC-RECV</b>	Gemini Commercial <b>Wireless 255 point RF Receiver</b> (up to 4 per system, max.)
<b>GEMC-WL-CO</b>	Wireless Carbon Monoxide Detector
<b>ADDRESSABLE FIREWOLF PERIPHERALS</b>	
<b>GEMC-FW-SLC</b>	Addressable <b>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 - 150°F, head**
<b>FWC-FSLC-DUCT</b>	Addressable <b>SLC Duct</b> smoke detector, photoelectric (Requires use of GEMC-24VR Voltage Regulator) Inclds 2 onboard relays that follow state of detector
<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 Conventional Zone module</b> , for monitoring of dry contacts, ie., pull stations and conv. smokes (Requires use of GEMC-24VR Voltage Regulator) Creates a 24V 2-wire fire zone on the SLC loop, selectable Class A or B zone wiring
<b>FWC-FSLC-RM2</b>	Addressable <b>SLC 2-output module</b> (requires 2 SLC addresses)
<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 (Requires use of GEMC-24VR Voltage Regulator)
<b>FWC-FSLC-PULL</b>	Addressable <b>SLC Fire Pull Station</b> , standard hex-key reset
<b>FWC-FSLC-PULLK</b>	Addressable <b>SLC Fire Pull Station</b> , 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 pull station, with key reset</b>
<b>FWC-FSLC-PROG2</b>	<b>Tool for address-programming</b> SLC devices
<b>FWC-FSLC-SMK6B</b>	** Smoke/Heat 6" Base, required for FWC-FSLC- SMK and -HEAT devices
<b>OUTPUT OPTIONS</b>	
<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 16Ah standby battns. Supervised, fire bus connection. System Sensor and Wheelock NAC sync. (5/system, for 20 add'l NAC circuits ttl.). 3 Programmable relay outputs; 2 low voltage; 1 high-voltage 120V rated relay
<b>GEMC-12V2AP5-CF</b>	<b>12VDC Power Supply for Fire Bus</b> , remote supervised. Direct 120VAC connection, supports 2ea. 12V, 7Ah to 16Ah standby battns.
<b>GEMC-RM3008</b>	<b>8 Form C Relay Output Module</b>
<b>GEMC-OUT8</b>	<b>PGM Output Module</b> , 8 open collector PGM outputs
<b>COMMUNICATION OPTIONS</b>	
<b>GEMC-NL-MOD</b>	<b>Internet Reporting Module</b>
<b>SLE-LTEV-FIRE</b>	<b>StarLink Fire™ Universal Sole Path Fire Cellular LTE Communicator, connected by Verizon® LTE</b> , works with virtually any 12-24V FACP. Panel-powered technology™ (powered by panel), Dual Diversity Antennae, receiving signals simultaneously on both antennae
<b>SLE-LTEA-FIRE</b>	Same as above but on AT&T® LTE Network
<b>SLE-LTEVI-FIRE</b>	<b>StarLink Fire™ Universal Dual Path Fire Cellular LTE Communicator, connected by Verizon® LTE</b> , Cellular &/or IP (primary or backup, selectable), works with virtually any 12-24V FACP. Panel-powered technology™ (powered by panel), Dual Diversity Antennae, receiving signals simultaneously on both antennae
<b>SLE-LTEAI-FIRE</b>	Same as above but on AT&T® LTE Network
<b>SLE-LTEV-CFB-P5</b>	<b>StarLink Fire™ Commercial Fire Mercantile Model</b> in red metal housing, LTE, Verizon LTE Network. <b>Direct 120VAC Powered</b> (w/ provisions for backup battery/charger). Or, Optional TRF20 plug-in transformer may be used, where codes permit, also available in LTEA and dual path units with suffix "I" for internet
<b>SLE-LTEV-CFB</b>	As above, <b>powered directly from control panel</b> , also available in LTEA and dual path units with suffix "I" for internet
<b>SLE-ANTEXT75</b>	Optional <b>extended antenna</b> with 75' cable (universal, marine grade). Also available in 30' (SLE-ANTEXT30) and 50' (SLE-ANTEXT50) cable



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