

## FEATURES:

- **Modular Design**
- **Addressable & Conventional inputs**
- **Up to 8 Addressable Loops per Panel**
- **Multiple Protocols simultaneously on the same loop**
- **Flash/Non-Flash LED Option**
- **Day / Night sensitivity settings**
- **Alarm Verification/Drift Compensation**
- **Up to 60 Conventional Zones**
- **4 Notification Appliance Circuits**
- **Notification Device Synchronization**
- **8 Amp Power Supply**
- **Panel to Panel Networking**
  - **Peer to Peer Communication**
  - **Up to 254 Nodes**
- **Remote programming option**
- **Up to 15 Remote LCD Annunciators**

## DESCRIPTION

The Evax FIRE 1 Series EF1 Fire Alarm Control Panel (FACP) is a completely modular design that can be addressable and/or conventional. The basic FACP comes with 2 (Model EF1) or 4 (Model EF1-4) addressable Signaling Line Circuits (SLC's)

In addition to the 4 SLC's housed in the main cabinet of the FIRE 1, 4 additional SLC's can be added externally for a total of 8 SLC's.

Each EF1-LC card provides 2 SLC's and each loop can be field configured for either Evax, Apollo or System Sensor protocol. Each SLC loop may be configured for any combination of these protocols simultaneously allowing up to 254 total device count per loop. Over 2000 devices with an 8 Loop panel. The SLC can be field wired for Class B (Style 4) or Class A (Style 6 or 7).

Alternately, the EF1 can be configured as a Model EF1-10C. This configuration utilizes an EF1-CM Conventional Zone card to provide Initiating Device Circuits (IDC's). The EF1-CM may be wired for 10 Class B or 5 Class A IDCs. Additional Conventional Zone cards (1 internal, 4 external) may be added providing a total of 30 Class A or 60 Class B IDC's.

The EF1 provides 250 user programmable software groups which can be associated with multiple input and output devices/circuits.

## EF1 Addressable/Conventional Fire Alarm Control Panel



EF1 FACP shown in optional GRAY cabinet



Listed to UL 864 9th Edition

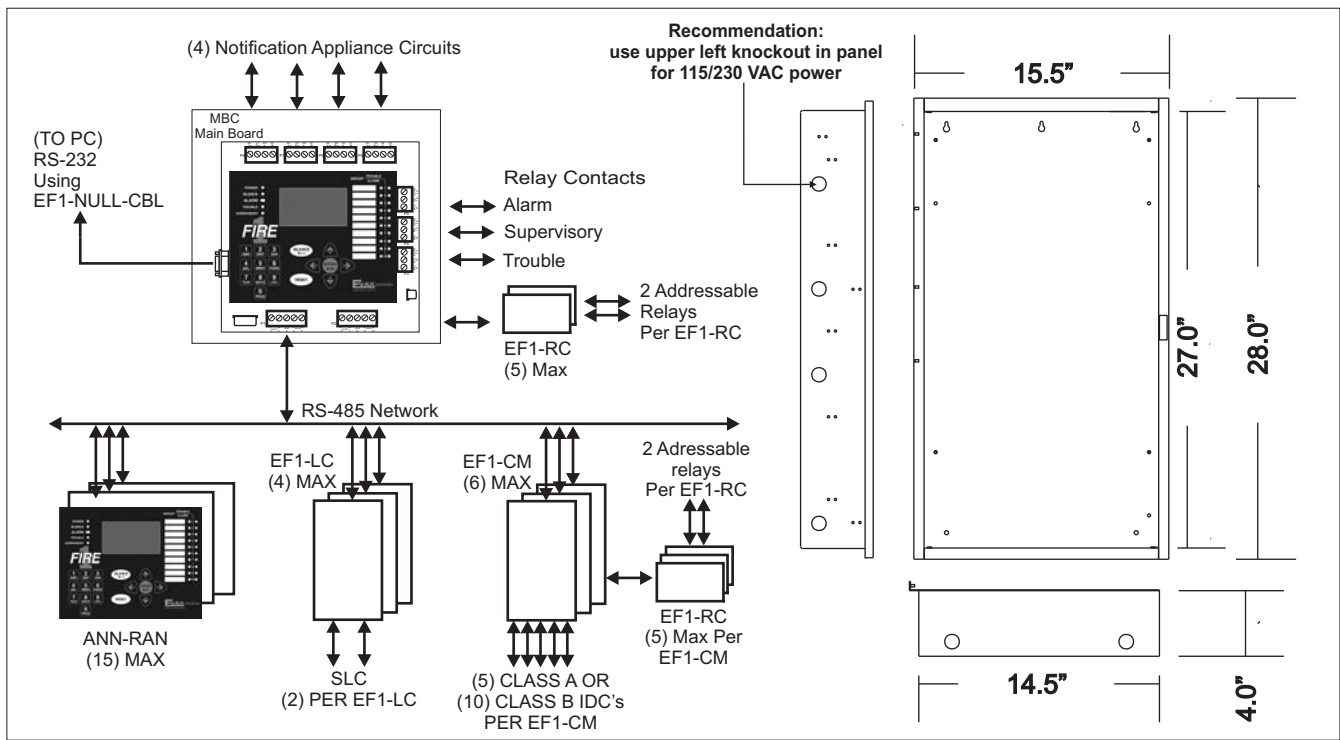
The EF1 FACP has the ability of remotely programming and troubleshooting the panel through the use of an optional modem installed at the FACP.

The EF1 can *auto program* devices on an addressable loop or program conventional zones on the system. Additionally the EF1 provides automatic drift compensation and alarm verification. It is easily programmed using the fire panel display/keypad or through the user friendly Evax system program software.

EF1-RC dual form C programmable relay cards can be connected to the MBC and to EF1-CM cards. The EF1 FACP also provides alarm, supervisory and trouble contacts. All relay contacts are rated 10A @ 30VDC, 10A @ 240VAC resistive, 3A @ 240VAC inductive.

Adding the EF1-NTWK Network card to the EF1 allows up to 254 EF1 & EF2 FACP's to be interconnected using twisted pair copper and/or fiber. Auto data rate allows each network link to operate at the most efficient communication speed.

The EF1 FACP supports up to 15 remote EF1-ANN LCD annunciators using the RS485 communication buss. This buss also connects to the Universal Digital Alarm Communicator Transmitter model EF-UDACT, City Tie/Reverse Polarity Module model EF1-UCT, & Serial Relay Module (8 addressable relays) model EF1-SRM (6 maximum per EF1 panel)



**How to Order:**

- EF1**                    **2 Loop Addressable FACP Apollo/System Sensor Protocol W/ RED Cab 115/230VAC, 50/60HZ**
- EF1-4**                **4 Loop Addressable FACP Apollo/System Sensor Protocol W/ RED Cab 115/230VAC, 50/60HZ**
- EF1-10C**            **10 Zone Conventional FACP w/Cab 115/230VAC, 50/60HZ**
- EF1-UDACT**        **SIA1 or Contact ID Protocol Digital Alarm Communicator Transmitter**
- EF1-CAB**            **EF1 & EF2 Cabinet only (Backbox & door)(red or gray)**
- EF1-2EXP**         **2 Addressable Loop expander includes 1 EF1-LC w/Cabinet**
- EF1-4EXP**         **4 Addressable Loop expander includes 2 EF1-LC w/Cabinet**
- EF1-10C-EXP**      **10 Class B or 5 Class A Conventional Zone Expander w/Cabinet**
- EF1-LC**             **2 Addressable Loop expander Apollo/System Sensor Protocol - Board only**
- EF1-CM**            **10 Class B or 5 Class A Conventional Zone - Board only**
- EF1-EXP**           **Expander Cabinet only (backbox & door)**
- EF1-ANN**          **Remote LCD/LED Annunciator in Cabinet**
- EF1-RAN**          **Remote LCD/LED Annunciator Board only**
- EF1-SRM**          **Serial Relay Module, eight (8) programmable relay board - Form C**
- EF1-MBC**          **115/230V Common System components (MCC, PDC & Power Supply)**
- EF1-NTWK**         **Peer to Peer Network card**
- EF1-RC**            **2 programmable relay board - Form C**
- EF1-RCCBL**        **Ribbon cable for the EF1-RC**
- EF1-MOD**          **Remote Communication Modem boards**
- EF1-KIT**            **Mounting hardware kit for LC/CM boards**
- G**                    **Use G suffix for optional GRAY cabinet**

**Engineering Specification**

The Fire Alarm Control Panel (FACP) shall be Addressable loop and Conventional Zone capable. Standard FACP shall be two (2) loops of addressable circuits expandable to eight (8). The system shall be multiple addressable protocol capable and allow any combination of addressable Evax, Apollo or System Sensor addressable devices on the loop simultaneously for a total of 254 mixed protocol devices per loop. Up to 60 conventional zones may be added to the system in groups of 10 circuits. Each expander module shall add an additional 10 conventional zones. These expander cards shall be housed in their own cabinets and be capable of being remotely located up to 4,000 feet from the main FACP. The main FACP shall communicate with addressable devices in both digital and analog communications formats. Panels without dual format will not be accepted. System shall have auto program capability, sensitivity adjustments, day/night sensitivity, holiday scheduling, off site programming and troubleshooting, shall be capable of adding internal Form "C" relay contacts housed in the main FACP cabinet, and be capable of automatic drift compensation. System shall be programmed using proprietary software or from the main FACP. Panel shall have the ability to add up to 15 remote LCD/LED Annunciators and have the option for digital communications. Panel shall charge up to 40 Ah's of standby batteries without the use of an external power supply. The panel shall contain four (4) on-board Notification Appliance Circuits (NAC's) that support multiple synchronization protocols or can be programmed as auxiliary power. The panel shall utilize a 8 x 20 character Liquid Crystal Display (LCD) with LED backlight and a 1,000-event history log. The panel shall support the interconnection of 254 panels in a single networked system and shall allow any two nodes to be connected using either twisted pair copper or fiber optic cable. Each node pair shall provide for automatic data rate optimization to allow maximum communication speed while minimizing data errors. Panels which do not provide automatic data rate optimization will not be considered equal. The panel shall be an Evax FIRE 1 Series EF1.

*Specifications are subject to change without notice. Specifications are provided for information only and no responsibility is assumed by Evax Systems, Inc. for their use.*

