

IP Fire Series™ Intelligent Fire Controls

- **ALM-10, ALM-02**
- **ALM-12**

Description

The architecture of an IP Fire Series™ fire control network is comprised of a series of IP-based distributable modules. These modules include alternate configurations of analog loop and NAC circuit modules (ALM-xy), standard display modules (SDM), annunciator control modules (ACM) and other specialized modules noted in other documents.

The Analog Loop Module (ALM) communicates with all other modules installed on the network through an Ethernet connection and is addressed through the ALM's unique IP address.

The ALM manages Class A/B Signaling Line Circuits (SLC), Class A/B Notification Appliance Circuits (NAC) or both, depending on the module configuration. The number of each type of circuit is specified by the trailing 2 digits in the ALM part number. Thus, an ALM-12 would have a single SLC and two NAC circuits.

Once programmed, each ALM maintains an integral 3000 event history log and will continue to operate its connected circuits even if communication with the remaining network is severed. Upon rejoining the network, the ALM will synchronize its data with the remaining modules.

ALM modules may be located anywhere within a facility and can be packaged in a variety of remote or pre-configured enclosures that allow for additional modules, common relay cards or displays to be packaged with the ALM.

Remote ALM's can draw power from a central location or can be furnished with an integral 24V, 8A power source and battery charger. ALM's may be added to the network in any number up to the system maximum module count of 50.

Each power limited NAC circuit can be synchronized and is rated at 24V/3A. Each SLC loop supports up to 126 addressable detectors (XP-95, Discovery or both on the same SLC circuit) as well as a variety of addressable input/output modules.

IP Fire Series™ systems feature SmokeClear™ to report when smoke has cleared the chamber of any detection device. This information is reported to the panel and recorded in the history log allowing first responders to determine the length of time that smoke was present at any given location when evaluating conditions upon arrival. SmokeClear™ will also put a notification on the system when pull stations have been reset signaling that the IP Fire™ system can be reset.




Features

- **Unique IP address**
- **3000 event history log per module**
- **May be distributed through facility in any number up to system max of 50 modules**
- **Continues to operate with loss of system communication**
- **Synchronizes data with network when communication link is restored**
- **SmokeClear™ alert signals when smoke has cleared detector chamber**
- **Can be distributed alone, with other modules, with central or local power**
- **Supports SLC circuits, NAC circuits - or a combination of each**
- **Power Limited Class A/B NAC circuits rated at 24V/ 3A each**
- **Each Class A/B SLC circuit supports 126 XP and Discovery detectors and devices on same circuit**
- **Modular listing**
- **Green/RoHS Compliant**

Listings

UL File: S24573
CSFM: Pending
MEA: Pending

Product	Data Sheet Number	Rev/Revision Date	
IPF Series™ ALM	1020	1.4/ 10/1/2009	

Engineer Specification

The contractor shall furnish and install, where indicated on the plans, central or distributed ALM-xy modules to provide for analog addressable SLC circuits capable of supporting 126 detectors and i/o devices in any combination and power limited 3A NAC circuits and attached devices capable of synchronized operation. The ALM-xy shall maintain an integral 3000 event history log and be capable of stand-alone operation should communication with the network be interrupted. The ALM-xy shall be capable of synchronizing its data with the remaining network when communication is restored. The ALM-xy must be distinguished by a unique IP address for secure communication and to distinguish it from all other modules on the network. The ALM-xy shall be capable of remote installation and shall be capable of being powered from a central 24V system source or with an integral 8A power supply and battery charger. The ALM-xy shall contain an integral USB 2.0 Type A communications port for program upload/download to/from a USB Mass Storage Device. The ALM-xy shall also be programmable through the USB ports of any attached VPM and SDM modules. The ALM-xy must be UL listed and UL listed as compatible with the AsBuilt IP Fire Series network fire controls. The ALM-xy modules shall be As Built Engineered Systems part numbers ALM-10, ALM-02 and ALM-12.

Technical Data

ALM-12

Quiescent Power Draw: 170 mA
Alarm Power Draw: 195 mA

ALM-10

Quiescent Power Draw: 149 mA
Alarm Power Draw: 155 mA

ALM-02

Quiescent Power Draw: 143 mA
Alarm Power Draw: 180 mA

Each SLC Circuit

Max Circuit Voltage: 24V
Max Current: 0.5A

Each NAC Circuit

Max circuit voltage: 24V
Max Current: 3A
Max RMS Operating Current (Single Notification Appliance): 0.5A

Maximum allowed:


Synchronized: max: 50
Non-Synchronized: max 30
Power Limited

Ordering Information

Part Number	Data Sheet	Description
ALM-10	1020	ALM Module with One Analog Loop SLC
ALM-02	1020	ALM Module with Two 24V NAC Circuits/ 3A each
ALM-12	1020	ALM Module with One SLC / 2NAC circuits

Related Modules, Accessory Cards and Cabinets

VPM/SDM	1010	VPM/SDM Configuration/Display Modules
XP, DISC	2100, 2105	Detection Options for XP and Discovery Product Lines
DXP-xxx	2810-2812	Addressable Device Options
MBLR	1051	Optional Masterbox/Line Reversal card
CCR	1051	Optional Common Control Relay Card
KPD	1053	Optional QWERTY Keypad
UXB	1052	Optional USB Extension Card
UXB-KS	1052	Optional USB Extension Card/Key Activated
RTR, EPROT	1030	Optional Routers and Ethernet Protection Cards
RTR-3	1030	Fiber-Optic Long Haul Routers
Cabinets	1045	IPF-xy, IPF-XL and REM- Cabinet Options
IPF/IPF-XL	1050	IPF-xy, IPF-XL Pre-Configured Systems

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