

### Description

The FxIP™ fire control network from Harding Instruments is a revolutionary IP-based fire control network consisting of a series of addressable control modules that can be distributed throughout any type of facility.

No central processing unit is required. Core modules connect to other core modules to form the fire protection system. With no single point of failure, distributed modules provide the greatest degree of scalability, survivability and building protection. True distributed architecture provides scalability and ensures reliable and timely response times.

The FC-250 is a pre-configured system that consists of pre-packaged IP-based modules in a single fire alarm cabinet. These systems are ideal for retrofit to existing buildings when field wiring has previously been terminated, as network nodes in a campus installation or for installations where the governing Authority Having Jurisdiction requires it.

The FC-250 can accommodate a display module (SDM3-IP/VPM3-IP), two open General Contact Slots for a Common Control Relays (CCR3) and a Municipal Box/Line Reversal (MLR3) card and 4 open bays to accommodate a mix of Addressable Loop Modules (ALM3-IP), and Ethernet Switch Units (ESU3-IP). The FC-250 is also supplied with a 10.5A Power Supply Unit (PSU3), a 70AH Battery Charging Unit (BCU3) and power management and distribution card (PSM3).

The exact configuration of any particular FC-250 is determined by the ordering number FC-250P-ABC-DDD-EEE-FFF-GGG.

The FC-250 is a feature-rich control panel that offers a multitude of features beyond flexible construction. All controls are locked behind a clear Lexan door. Two built-in USB 2.0 Type A connectors accessible from the front are available for programming, backup and keyboard. Each IP module maintains its own 3000 event history log.

Unmatched panel level features include group/zone assignments and Control-By-Event (CBE) output programming, Boolean logic CBE output programming, day/night sensitivity settings, coded signaling on IOC\NAC circuits, programmable soft keys, walk-test, bypass, self-healing networks and much more.

In addition, the ALM3-IP module(s) provide the addressable circuitry for Harding's Series 22 detector lines as well as Series 21 I/O devices, offering a broad range of cost effective and intelligent detection and control solutions.

The FC-250 has been tested by Underwriter Laboratories to conform with UL864/10<sup>th</sup> Edition and has been tested for compliance to FCC Part 15.



### Features

- Configured systems are ideal for retrofit work when wiring is already terminated at a central location
- May be used as a starting point in a broader distributed FxIP™ fire network
- Distributed modules may be added to the system from any point in the protected facility
- Ethernet connection provides fast, secure communication
- On board USB ports for upload/download to USB Mass Storage Device, keyboards
- ALM3-IP Supports Harding's Series 21 and Series 22 detectors
- 3000 event history per module
- Programmable soft keys
- Groups/Zones assignments and CBE routines
- Advanced Boolean Logic CBE Routines
- Coded Signaling on integral NAC circuits
- 3A IOC\NAC circuits Special Application
- Up to 10.5 A of system power
- Charges up to 70AH batteries
- Day/night mode
- Green/RoHS Compliant

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Represented by:



# Harding Distributed Fire Control Panel

**FC-250  
Control Panel**

## Specification

### Physical Form

25 5/8 x 15 1/16 x 6 1/4 (651 x 383 x 159mm)

### Environmental

Operating Temperature

0° C to 49° C (32° F to 120° F)

### Humidity

(non-condensing) of 85% at 30° C (86° F)

### Power Requirements

Input voltage 115 Vac 60Hz 5 A max

### Internal

Output Voltage 24Vdc 10.5 A max

Regulated 24 DC, Power Limited,

Non-Resettable, Unsupervised

### External

Special Application for: RA-220P-1,

AC-100P-1-AAA-BBB, AC-100P-2-ABC-DEF

ACM3-IP, AXM3, Power Limited – 3 A max load

Non-Resettable, Unsupervised

## Listings

UL 864/10<sup>th</sup> Edition File (S35453)

FCC Part 15 Class A Compliant

## Module Data Sheets

Part Number	Data Sheet	Description
VPM3-IP	DS-VPM3-IP/SDM3-IP	SDM3-IP configured as VPM3-IP Module for System Management
SDM3-IP	DS-VPM3-IP/SDM3-IP	Standard Display Module
CCR3	DS-CCR3/MLR3	Common Control Relay Card
MLR3	DS-CCR3/MLR3	Municipal Box/Liner Reversal Card
ALM3-IP-10	DS-ALM3-IP	ALM3-IP Module with 1 1A/24V SLC, 0 3A/24V IOC\NAC Circuits
ALM3-IP-02	DS-ALM3-IP	ALM3-IP Module with 0 1A/24V SLC, 2 3A/24V IOC\NAC Circuits
ALM3-IP-12	DS-ALM3-IP	ALM3-IP Module with 1 1A/24V SLC, 2 3A/24V IOC\NAC Circuits
ALM3-IP-20	DS-ALM3-IP	ALM3-IP Module with 2 1A/24V SLC, 0 3A/24V IOC\NAC Circuits
ALM3-IP-22	DS-ALM3-IP	ALM3-IP Module with 2 1A/24V SLC, 2 3A/24V IOC\NAC Circuits

## Related Data Sheets

**Series 22 Detectors: PHOTO (DET2204), DS-DET2204; HEAT (DET2201), DS-DET2201; MULTI (DET2205), DS-DET2205;**  
**Series 21 I/O Devices: Switch Monitors (IOM2101, IOM2104, IOM2105, IOM2108, IOM2109), DS-IOM2810; Input/ Output (IOM 2102, IOM2106, IOM2110), DS-IOM2812; Sounder Control (IOM2107), DS-IOM2814, Dual Priority Switch Monitor (IOM2103), DS-IOM2816; Relay Output Module (IOM2111), DS-IOM2818; Addressable Base Options: All Bases, DS-DET2310;**

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Represented by:

FC-250 P - A B C - DDD - EEE - FFF - GGG						
Paint						
Red	R					
Beige	B					
Control Option						
None (Blank door)	0					
VPM3-IP c/w UXB3	1					
SDM3-IP c/w UXB3	2					
Optional						
None	0					
KBD3	1					
General Contact Slots						
None	0					
CCR3	1					
CCR3 x 2	2					
MLR3	3					
CCR3 + MLR3	4					
Module #1 (lower right)						
ALM3-IP-AI			1AI			
Module #2 (lower left)						
None				000		
ESU3-IP				300		
Module #3 (upper right)						
None					000	
ALM3-IP-AI					1AI	
Module #4 (upper left)						
None						000
ALM3-IP-AI						1AI

A = # of Addressable loops, I = IOC/NACS

A I Valid Combinations = 02, 10, 12, 20, 22