

## Description

The architecture of an FxIP™ fire control network by Harding is comprised of a series of IP-based distributable modules. These modules include alternate configurations of Addressable loop and IOC/NAC circuit modules (ALM3-IP-xy), standard display modules (SDM3-IP/VPM3-IP), annunciator control modules (ACM3-IP) and other specialized modules noted in other documents.

With distributed systems, power requirements can be varied according to system layout. With FxIP™ fire controls, power can be centrally located and then distributed from the central location to remote system modules or power can be supplied along with the remote system modules.

The Power Supply Unit (PSU3) provides 24V/10.5A of system power. Power is available for all IP modules, switches, XPansion bus modules and attached devices.

Battery charging is accomplished by the Battery Charger Unit (BCU3) which provides 27.6V/2.4A of battery charging power. The BCU3 is capable of charging 70Ah batteries.

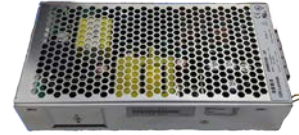
The Power Supply Module (PSM3) supervises the PSU3 and BCU3 and monitors the panel and associated field wiring for earth ground faults. The PSM3 provides connections for both internal and external (power limited) 24VDC. The PSM3 also monitors for brownout conditions, low/no batteries and other electrical monitoring functions established by UL 864/10<sup>th</sup> edition.

The PSM3 utilizes a fuse to provide over-current protection for the batteries. The FC-250 cabinet also has an inline fuse holder in series with the battery wiring. This fuse protects the batteries from a potentially dangerous discharge if there is a fault in the battery wiring.

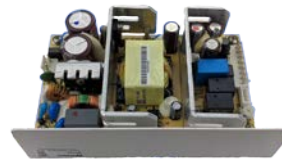
## Listings

UL 864/10<sup>th</sup> Edition File (S35453)  
FCC Part 15 Class A Compliant

PSU3



BCU3



PSM3



## Features

- Provides power for all Harding modules, switches and connected devices
- Provides battery and brown out supervision
- Switching 10.5A Power Supply Unit (PSU3) mounts in pre-configured or remote cabinets
- Switching 2.4A Battery Charging Unit (BCU3) mounts in IPF pre-configured or remote cabinets
- Supervised and Controlled by the Power Supply Monitor (PSM3)
- Charges 70Ah Batteries
- Power supply module (PSM3) provides for secure module power connections, battery disconnect and transient voltage protection for an Ethernet cable leaving the cabinet
- Maximum number on an individual system: unlimited

## Engineer Specification

The contractor shall furnish and install, where indicated on the plans, integral power supply and battery charger modules for local and distributed Harding network fire system modules. The power supply, battery charger, monitor card and power distribution board in combination shall be fully supervised and shall monitor for the presence of AC power as well as battery power and also monitor for low/no battery and brown out conditions. The battery charger shall be capable of charging 70 AH batteries. The power supply, battery charger and power supply monitor board in combination must be UL listed and UL listed as compatible with Harding network fire controls. The power supply, battery charger, power supply monitor and power distribution board shall be Harding part numbers PSU3, BCU3, and PSM3.

## Technical Data

### PSU3

Input Voltage: 115 VAC/60Hz

Output Voltage: 24VDC

Output Current: 10.5A

### BCU3

Input Voltage Range: 115 VAC/60Hz

Output Voltage: 27.6VDC

Output Current: 2.4A

Rechargeable Battery Circuit:

Type: Sealed Lead Acid

Voltage: 27.6

Max. Amp Hour Capacity: 70

### PSM3

Input Power: 115 VAC/60Hz

Output to Modules in Same Enclosure:

24 VDC/ 10.5A/non-resettable

External Power: 24VDC, 3.5A, Power Limited

## Ordering Information

Part Number	Description
PSU3	Power Supply Unit
BCU3	Battery Charger Unit
PSM3	Power Supply Module

## Related Modules and Accessory Cards

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
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
ACM3-IP	DS-ACM3-IP	Annunciator Control Module (IP LED/Relay Controller)
MLR3	DS-CCR3/MLR3	Optional Masterbox/Line Reversal card
CCR3	DS-CCR3/MLR3	Optional Common Control Relay Card
ESU3-IP	DS-ESU3-IP	Ethernet Switch Unit
EIS6	DS-ESU3-IP	Fiber-Optic Switch

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