



## FIREWATCHER CONTROL PANELS

FireWatcher FW106 is an addressable Fire Alarm Control Panel designed for small to medium scale facilities. It is ideally suited for both new and retrofit commercial, institutional, and industrial fire detection and notification applications.

FireWatcher FW106 is a state of the art addressable fire control system that meets the requirements of UL864 10th edition, and ULC S527. It can support 4 addressable Loop Signaling Line Circuits and 1,008 addressable devices/points, with 4 Notification Appliance Circuits and 5 form C dry relay contacts.

The FW106 has a 7" LCD display with 800 X 480 resolution, 6 auxiliary function keys and 9 LED indicators making it a highly intuitive fire alarm user interface. It can also be connected to 4 remote annunciators via an external network to form a fire emergency detection and notification network system.



FireWatcher 106



# CONTROL PANELS



The LCD screen can display up to 8 events simultaneously. Users can browse more events by pressing the up/down buttons until the first or last event message is reached.

It is ideally suited for both new and retrofit commercial, institutional, residential and industrial fire detection and notification applications.

- PAS (Positive Alarm Sequence)
- Two-Stage Alarm (ULC)
- Alarm Verification
- Silence Inhibitor
- Trouble/Supervisory Resound
- Boolean logic programming with device virtual addressing
- Simultaneous display of multiple active events on large graphic LCD
- Fully programmable from the front panel or via laptop

General	Digital signal processor-based design, fully configurable from front panel with password protection
Environmental	Operating temperature - 32 - 120°F (0-49°C) Relative humidity - 0% to 93% RH To be installed in normal dry indoor environment only
Primary Supply	110 - 120 VAC 50Hz/60Hz (3A), or 220 - 240 VAC 50Hz/60H (1.5A)
Secondary Power Supply	Charging capacity: 42AH
Power Outputs	Internal power supply for - AMI User interface / display; - ALUs Addressable Loop Circuits; - NOUs Notification Appliance Circuits; - XNUs External Network Circuits; - ROUs Relay Output Circuit; One auxiliary power supply - Resettable Power Output / Non-Resettable Power Output (configurable); - Power limited; - 24 VDC; 1.2 amps - Output current: 500 mA in normal standby, 1200 mA in alarm.
Relay Outputs	One programmable relay 4 non-programmable status relays Status: Alarm, Supervisory, Trouble, Monitor Form C contact Contact rating: 2A 30 VDC.
Remote Com Circuits	Supports 4 annunciators Supervised wiring
Notification Appliance Circuits	Class A/ Class B circuit      Bell code: ANSI (3-3-3 temporal) 4 circuits per panel 2 Amp per NAC Supervised wiring Synchronized Outputs
Addressable Loop Circuits	Maximum Current (Short): 0.4A Class A/ Class B circuit 252 addresses: detectors and modules max Output voltage range: 20.4V - 28V Normal standby current: 100mA / Alarm current: 220mA Up to 4 loops per panel



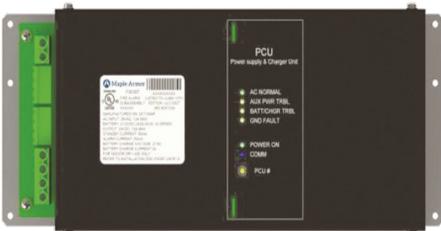
## COMPONENTS



### AMI - Advanced Machine Interface

The AMI integrates a CPU board, a 7" LCD, 4 signal status LEDs, 5 system status LEDs, 5 navigation and enter buttons, 6 functionality buttons, and a buzzer. It meets the UL864 10th Edition Listed standard and the ULC-S527 3rd Edition Listed standard.

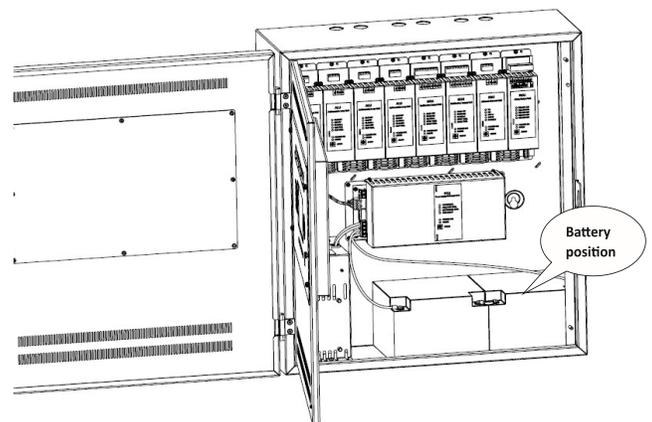
Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	143 mA
Alarm Current	146 mA
Operating Temperature	32°F to 120°F (0°C to 49°C).
Operating Humidity	0% to 93% RH
Dimension	482mm (L) x 266mm (W) x 43.8mm (H)



### PCU - Power Supply & Charger Unit

The PCU provides power supply output to the system (AMI, ALU, NOU, ROU, XNU) with regulated 24 VDC. The FW397 uses a microprocessor-controlled transfer circuit to switch power supply for the system to stand-by batteries when AC power is off.

AC Input Rating	24 VDC, 12 A max.
Battery Rating	2 x 12 VDC lead-acid battery in series
Battery Charge Voltage	27.8 VDC
Battery Charge Current	3A
Output Electrical Rating	24 VDC, 12 A max.
Standby Current	65mA
Alarm Current	65mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	293mm (L) x 120.5mm (W) x 63.5mm (H)
Power Outputs	One auxiliary power supply: – Resettable power output/non resettable power output (configurable); – Power limited; – 24 VDC; 1.2 amps
Weight	60oz (1.7kg)





## ROU - Relay Output Unit

One ROU card can support five dry contacts relays: Alarm Relay, Supervisory Relay, Trouble Relay, Other Signal Relay, and Programmable Relay. The Relay contacts are in the C Form Style. The address is set by the rotary switch on the board. It meets the UL864 10th Edition Listed standard and the ULC-S527 3rd Edition Listed standard.

Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	35 mA
Alarm Current	35 mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)



## NOU - Notification Output Unit

One NOU can support two independent notification appliance circuits with synchronization. The circuit topology supports Class A or Class B wiring. The maximum current is 2A per NAC, for a maximum of 4A total per NOU.

Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	36 mA
Alarm Current	54 mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)



## XNU

The XNU allows the FW106 Control Panel to communicate with up to four FW121 or FW122 annunciators. The circuit topology supports Class B wiring. The address is set by the rotary switch on the board.

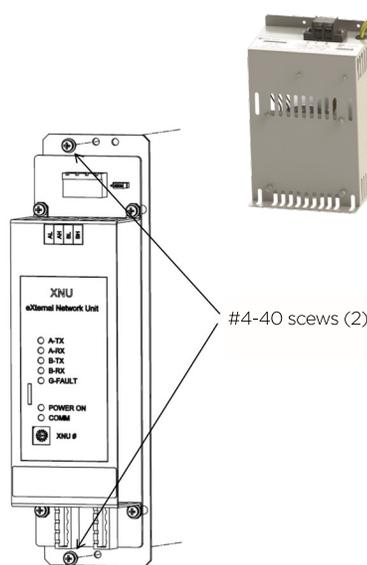
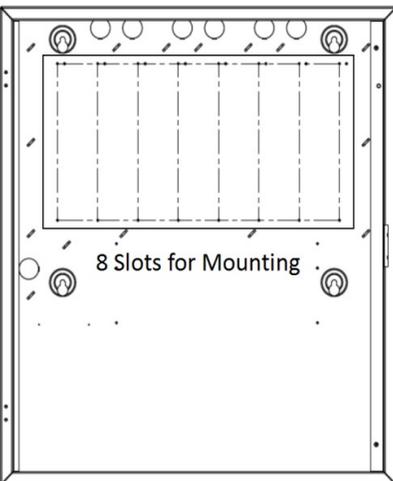
Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	27 mA
Alarm Current	27 mA
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)
Weight	10.2oz (289g)



## ALU - Addressable Loop Unit

One ALU can support one addressable loop circuit, which supports up to 252 points of addressable devices. It can initialize and operate all devices residing on the loop and it communicates all relevant device and event information, such as alarms and troubles, to the System Central Processing Unit (CPU).

Nominal Voltage	24 VDC
Voltage Range	20.4 to 26.4 VDC
Standby Current	27 mA
Alarm Current	27 mA
Operating Temperature	32°F to 100°F (0°C to 38°C)
Dimension	215mm (L) x 55mm (W) x 50.3mm (H)
Operating Humidity	0% to 93% RH



#4-40 screws (2)



## PTU - Power Supply Transformer Unit

The PTU contains an internal transformer which converts 110-120VAC or 220-240VAC input to 24VAC output. It meets the UL864 10th Edition Listed standard and the ULC-S527 3rd Edition Listed standard.

Input Electrical Rating	110 - 120 VAC, 50Hz/60Hz, 3.86A 220-240 VAC, 50Hz/60Hz, 1.96A
Output Electrical Rating	24 VAC, 12 A max
Operating Temperature	32°F to 120°F (0°C to 49°C)
Operating Humidity	0% to 93% RH
Dimension	227mm (L) x 140mm (W) x 106mm (H)