FW2107/FW2107C

Maple Armor

AGENT RELEASE CONTROL PANEL AND FIRE ALARM CONTROL PANEL

General

The FW2107(C) is an intelligent fire suppression control panel designed for fire suppression facilities and can also be used as an Intelligent Fire Alarm Control Panel (FACP) for small and medium-scale facilities. The Panel is ideally suited for both new and retrofit commercial residential, institutional, and industrial fire detection and notification applications.

The Panel supports up to 252 addressable devices on 1 SLC, 2 NACs and three Form-C relays (pre-programmed for Alarm, Trouble and Supervisory). In addition, the control panel can be used for hazardous agent releasing application via FW2822 module.

The FW2107(C) is an addressable fire control system with dual hazardous agent releasing that meets the requirements of UL 864, and CAN/ULC-S527.

Model FW2107 is UL approved. Model FW2107C is ULC approved.

Features

- 1 Signaling Line Circuit and maximum 252 addressable devices.
- Up to 2 Notification Appliance Circuits
- 3 form C dry relay contacts
- Up to 2 releasing zones
- Minimum 8 input zones
- A 2.8" true color LCD
- Meta black enclosure
- 29 input keys
- 10 general LED indicators
- Ethernet and USB port for local programming

Specifications

- Digital signal processor-based design, fully configurable from front panel with password protection
- Operating Temperature: 14 – 131℉ (-10 – 55℃)
- Relative Humidity: 0% to 95% RH Non-condensing
- To be installed in normal dry indoor environment only
- 120V~,60Hz,3.2A MAX or 240V~,50Hz,2.0A MAX, supervised
- Two 12V in series lead-acid batteries set, charging capacity: 55AH , supervised

– **Auxiliary Output:**

- Non-Resettable/Resettable Power Output (configurable)
- Maximum 650mA (normal standby), 3.0A (alarm)
- Output voltage: 19.3V - 27.9V
- Power Factor Rating: 0.35
- Special application: Compatible devices are Supervised Output Module Model FW2821 / FW2821H and releasing module FW2822.
- Supervised. Class E, or Class B when powering models / FW2821 / FW2821H / FW2822.

– **SLC**

- Supervised - Class A/DCLA or Class B/DCLB circuit
- Max 252 addresses: detectors, manual release stations, abort switches and modules
- Output voltage range: 26.1V - 27.3V
- Maximum normal standby current: 100mA
- Maximum alarm current: 250mA
- Max. line capacitance = 0.5 ☐F
- Max. line resistance = 20 Ω per line

– **NAC**

- 2 circuits, power Limited
- One regulated 24 VDC NAC, or up to 2 special application 24 VDC NAC.
- Supervised - Class A/DCLA / Class B/DCLB circuits
- Maximum Current: Regulated 1 Amp total, or Special Application 2 Amp each circuit
- Bell code: Steady, Temporal 3(alarm tone), Temporal 4, March Time 20/60/120 beats per minute (BPM)
- Max line loss: 2.2 V

– **Relay Outputs**

- 3 Form C relays: Alarm, Supervisory and Trouble
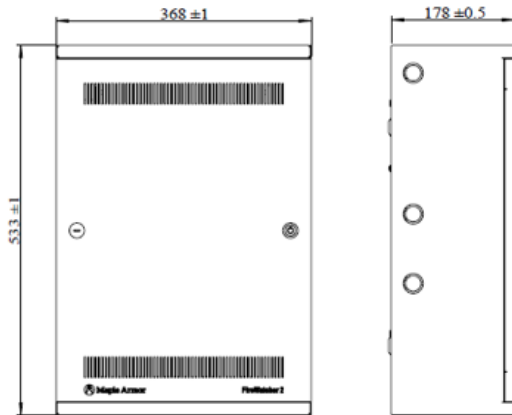- Contact Rating: 2A / 30VDC, 0.6 pF
- Not supervised

– **Recommended Testing impendence**

- 6.6 kΩ for ground fault
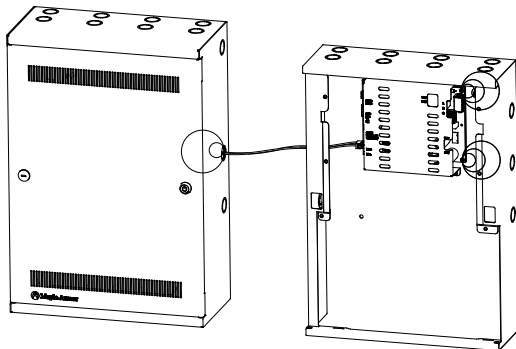- 10 MΩ for open circuit
- 0.1Ω for short circuit

External Battery Box (Model FW2131)

The FW2107(C) panels provides space for up to two 18 AH batteries. Larger batteries require the use of a UL/ULC Listed External Battery Box, Model FW2131, as shown in Figure 6 and Figure 7. External Battery Box needs to be ordered separately.
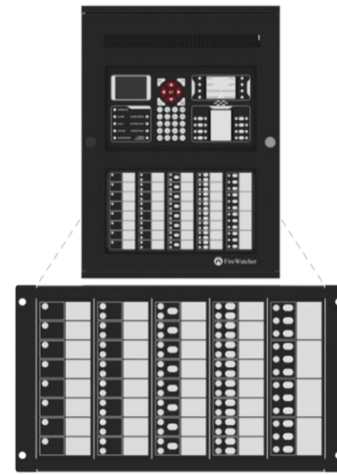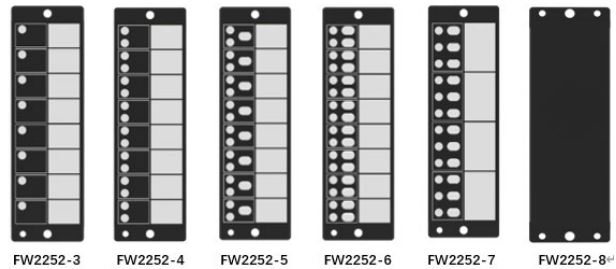
FW2131 battery box dimensions(mm):

Connection between FW2131 battery box and FW2107(C) panel: Refer to DOC-FW2131-UM for more details.

Optional LED annunciator (FW2261)

The FW2261 can be installed with 5 daughter cards, which can be selected from any of the following 6 seed cards:

FW2252-3   FW2252-4   FW2252-5   FW2252-6   FW2252-7   FW2252-8

Module	LED colors	LED Quantity	Button Quantity	Zone quantity	Optional quantity
FW2252-3	Red/Green/Yellow	8	0	8	0~5
FW2252-4	Red/Yellow	16	0	8	0~5
FW2252-5	TOP：Red/Green Bottom：Yellow	16	8	8	0~5
FW2252-6	Red	16	16	8	0~5
FW2252-7	TOP/Bottom：Green Middle：Red/Yellow	12	12	4	0~5
FW2252-8	-	-	-	-	0~4

Product Line Information

FW2107: intelligent fire suppression control panel designed for fire suppression facilities and can also be used as an Intelligent Fire Alarm Control Panel (FACP), UL approved.

FW2107C: intelligent fire suppression control panel designed for fire suppression facilities and can also be used as an Intelligent Fire Alarm Control Panel (FACP), ULC approved.

Detectors and Devices:

Model No.	Description
FW2511	Photoelectric Smoke Detector
FW2521	Heat Detector
FW2721	Dual Action Manual Station
FW2722	Two-Stage Manual Station
FW2723	Single Action Manual Station
FW2811, FW2811H	Input module
FW2811M	Mini Input Module
FW2821, FW2821H	Supervised Output Module
FW2831	Relay Module
FW2822	Supervised Output Module
FW2851, FW2851H	Isolator Module
FW2731	Manual Releasing Station
FW2732	Abort Switch

NFPA Standards

FW2107(C) complies with the following NFPA 72 Fire Alarm Systems requirements:

- **NFPA 12** CO_2 Extinguishing Systems
- **NFPA 12A** Halon 1301 Extinguishing Systems
- **NFPA 2001** Clean Agent Fire Extinguishing Systems
- **NFPA 12B** Halon 1211 Extinguishing Systems
- **NFPA 72** National Fire Alarm Code for Local Fire Alarm Systems and Remote Station Fire Alarm Systems (requires an optional Remote Station Output Module)

Agency Listings and Approvals

The listings and approvals below apply to the basic FW2107(C) control panels. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL/ULC: file S35910, Standard UL864/ CAN/ULC-S527