



## Addressable Fire Alarm

# CONTROL PANEL

July, 2017 Prepared By : AK

# CHAPTER 1 GENERAL INFORMATION

### 1.1 INTRODUCTION

Asenware AW-FP100 Series Fire Alarm Control Panel are intelligent panel which are carefully designed to make it suitable for most of applications. It can be configured with other panels or control systems. It's user friendly functionality makes it suitable to program and configure the devices. 7" touchscreen display gives the information for fire alarm, trouble, supervisory and other related information all the time.

### **1.2 SYSTEM FEATURES**

- 7" Touchscreen LCD Color Display which gives necessary and additional information as described in EN:54-2
- Delay function for zones for Notification Appliance Circuits (NACs)
- 2 wire cable for all addressable devices
- Zone test and individual device testing
- Zone Disable and individual device isolation
- Delay, override and abort functionality
- User friendly: easily configurable windows using Panel itself
- 250 intelligent detectors or modules for one loop circuit
- Up to 8 Loop cards can be installed and configured
- Interconnection of ....panels and other equipments
- 2000\* events can be stored in the history
- Mini- Printer to print the status of events
- Network with Central Control Panel
- Access Level entry to control and configure panel
- Integral power supply with charger
- Circuits can be configured as Class A or Class B
- Fire Alarm, Fault (Trouble) and Supervisory relays
- Earth Fault detection
- CAN BUS Network System
- Network Available Options : GSM/IP/Cloud/ Mobile APPs



#### 1.3 DISPLAY AND FUNCTION KEYS

Large display screen makes the panel easily programmable, below Figure 1.1 shows LED indicators and functions keys available

#### 1.3.1 Liquid Crystal Display

It displays all programming screens, as well as events, history, device and other information. At normal condition it displays Fire, Fault , Supervisory and general information. Mosts Recent events are displayed on the 7" touchscreen LCD. Effortless programming can be performed using alphanumeric keyboard.



#### 1.3.2 Fixed Function Keys

#### Reset

Press RESET to eliminate all current alarms and reboot the system. The whole process takes 30-60s.RESET clear all latched alarms and other events as well as turn off event LEDs. If alarms or other off-normal events exist after reset, they will resound the system and relight the LEDs.

#### **Evacuate**

Press this key, holding it down for 2 seconds, to activate all silenceable fire output circuits.

#### **Panel Buzzer Silence**

By pressing this key, the panel sound will be silenced but LED will keep open.

#### **Remote Sounder Silence**

By pressing this key, it will silence all Notification Appliances.

#### **Test**

For Lamp Test, press this key to test the LED indicators on the left of the keypad, the panel circuit LEDs.

#### 1.3.3 LED Indicators

Table 1.1 LED Indicators

| LED INDICATOR          | COLOR  | FUNCTION   |
|------------------------|--------|--|
| Power                  | Greeen | Illuminate when power supply is on   |
| Fire Alarm             | Red    | Illuminates when at least one fire alarm event exists                                      |
| General Fault          | Yellow | Illuminates when at least one fault occurs   |
| Evacuate               | Yellow | Illuminates when evacuation or drill process occurs  |
| System Fault           | Yellow | Illuminates when any system is in fault or system is not working as expected               |
| Panel Buzzer Silence   | Yellow | Illuminate when panel is silenced and stay flashing until panel is reset                   |
| Supervisory            | Yellow | Illuminates when at least one fire alarm event exists                                      |
| Remote Sounder Silence | Yellow | Illuminate when Notification Appliances is silenced and stay flashing until panel is reset |
| General Disable        | Yellow | Illuminates when disable has been performed  |
| Test                   | Yellow | Illuminate when the panel carries out Lamp test for all LEDs                               |

### 1.4 SYSTEM COMPONENTS

AW FP 100 Series Fire Alarm Control Panel are composed of the following main parts

### 1.4.1 Main Control

The main control part is responsible for processing and analyzing the data transmitted from other parts, and activating other parts of the system based on the result of data analysis, for example, sounding the buzzer of the panel when a fire is detected.

### 1.4.2 Display Element

The display element provides main output interface for alarm signal, fault, supervisory and interface for routine maintenance and query.

#### **ASENWARE LTD.**

#### 1.4.3 Input Method

From the display, it is very convenient for the programmer to input and register the devices.

#### 1.4.4 Power Supply

The power supply is designed to supply power to all devices in the system. The system adopts the special firefighting equipment powered with DC 24V output, which can provide alarm or feedback signals, such as main power fault, battery fault, battery under-voltage and battery charging, and have a good capacity for interference.



Customer is recommended to do battery calculation for proper rating of batteries

#### 1.4.5 Loop Card

The loop card is used as the driver of detector/module bus, which may drive 250 intelligent detectors or intelligent modules and can be equipped with bus type fire indicating panel.

#### 1.4.6 Interconnection with Devices

The system can get access to various intelligent smoke, heat or combination detectors produced by the manufacturer, and the main types include detectors, modules, horn strobes, manual call point and so on.

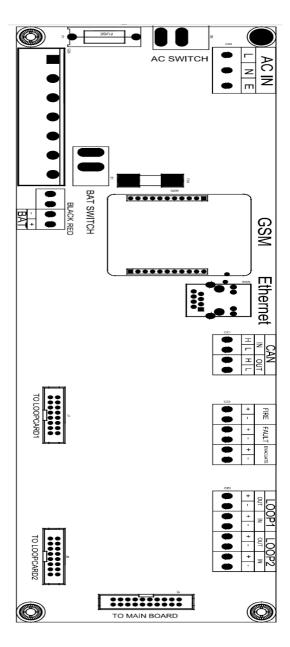
The system can be interconnected to Modules, Manual Call Point, Relays, Deluge vale and Gas System. The system can get access to multiple intelligent modules e.g. Input module AW-D110, Control Module AW-D112, Supervisory Module and Isolator Module AW-D111 and D114 respectively. Moreover, it can also get access to intelligent sounder visual indicator AW-D106, and intelligent manual call point AW-D105. Panel can be configured with Gas Extinguishing system, deluge system or other water based system and supervisory of various types of valves.

#### 1.4.7 Printer

The system is equipped with a special mini-printer as standard, which can print alarm, supervisory and fault messages for future reference.

## 1.4.8 Printed Circuit Board

The control panel electronics are contained on one printed circuit board that incorporates with loop cards and the central processing unit (CPU). The built-in power supply includes an integral battery charger. A display unit is connected over the PCB.



#### **ASENWARE LTD.**

## **1.5 TECHNICAL PARAMETERS**

## 1.5.1 Power Rating

Mains power supply: AC 220V±20%/50Hz or DC24V;

Backup power supply: DC24V maintenance-free battery BAT12V/5AH

## **1.5.2 Environmental Condition**

Ambient temperature: -10°C~+55°C

Ambient humidity: ≤95% (40°C±2°C, no condensation)

## 1.5.3 Terminals

Refer to product instructions for detailed technical parameters of the detector, module, sounder visual indicator and so on

