## General Description

FloWatch is a sprinkler system fault signal and alarm device signal monitoring system designed to meet the requirements of BS9251:2021. It is suitable for single or multiple occupancy dwelling to monitor correct signaling of flow switches, pump faults, isolation valves, trace heating and cold water storage tank levels installed as part of a fire sprinkler system.

FloWatch will continuously supervise the main function of the system and raise a supervisory alarm to allow corrective measures. Failure to supervise the system components will impair the correct automatic operation of the system in the event of a fire.

## System Operation

Each system will consist of one master panel with the capability to add up to 16 expansion modules for additional monitored devices (inputs)

FloWatch operates in two formats;

**Offline Mode**

- Display/identify the relevant system faults/alarms and the associated input device name/location on the LCD

- The relevant LED will illuminate in the event of any fault (amber LED) or alarm (Activation of device - red LED)

- Sound in the event of any fault or alarm activation

**Online Remote Service (Subscription required)**

In addition to the Offline operation, the online remote service enables the user to:

- Remotely view the system state and setup via web browser

- Receive email alerts of any faults and alarm activations

- Receive text message alerts of any faults and alarm activations

Note: FloWatch provide 12 Months Free subscription with all systems.

## FloWatch Monitored Devices (Inputs)

The FloWatch system monitors the following:

- Flow switches for sprinkler activation

- Correct position of monitored isolation valves

- Water level switches in storage tanks (fixed input)

- Pump Fault - output signal from pump, pump control or booster set (fixed input)

- Pump Running - output signal from pump, pump control or booster set

- Trace heating faults

- Supervisory faults (Short & Open circuits)

In total the FloWatch system is capable of monitoring 2 fixed inputs plus 132 'configured input' devices

## FloWatch Master Panel



**Master Panel**

- Monitor 2 Fixed Inputs (Pump Fault, Tank Low Level)

- Monitor up to 4 'configured inputs' (Flow Switches, Isolation Valves, Pump running, Heating system)

- Local audible alarm (internal sounder)

- Visual identification (LCD screen message and LEDs)

- Expandable - accommodates both 4 way and 8 way expansion modules

- Battery back-up (battery not supplied)

- Built-in GSM Sim for online remote service

## FloWatch Expansion Modules



**Expansion Modules**

- 4 way expansion unit allows connection of 4 'configured inputs'

- 8 way expansion unit allows connection of 8 'configured inputs'

- 8 way expansion units have built in temperature sensors to identify the temperature of the area of installation

- No power required to expansion unit - powered via master panel wiring

- Visual identification (LEDs of relevant input)

- Addressable - all expansion modules and associated inputs are individually identified

Note: If an input connected to the expansion modules is in alarm or fault state, the master panel will display the alarm/fault on the LCD screen, emit the sounder and activate the relevant LED.
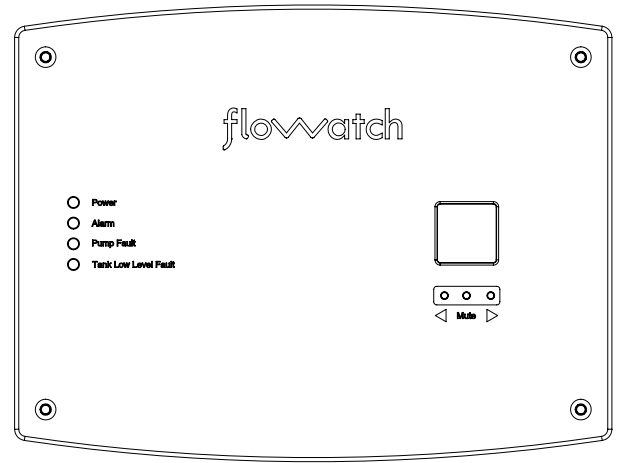
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## Input Device Table

| Monitored Device | Input Type | LED |
|---|---|---|
| Tank Low Level | Fixed Input* | Tank Low Level Fault |
| Pump Fault | Fixed Input* | Pump Fault |
| Flow Switch | Configured Input** | Alarm |
| Isolation Valve | Configured Input** | Alarm |
| Pump Running | Configured Input** | Alarm |
| Heating System | Configured Input** | Alarm |

*Can be connected to Master Panel only

**Can be connected to Master Panel and/or Expansion Unit

The FloWatch system will monitor the supervisory circuit of all input devices through installation of resistors

## Outputs

FloWatch Master panel provides two, volt free outputs for optional integration into alternative alarm panel, BMS or for correct activation of priority demand valve.

- Fire AI - Operated when any flow switch is in alarm state
- BMS

  - 'TANK LOW ONLY' - Operated when the tank low level input is in alarm state (typically used in a system utilising a priority demand valve)
  - 'All' - Operated when any monitored device is in short circuit, open circuit and alarm state (typically used when connecting to a BMS)

## Material specification

ABS - UL94 Listed, grade V.0 (Flammability)
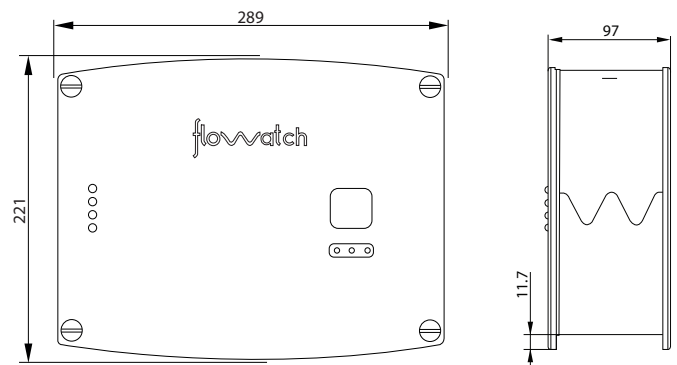
## Installation

Power supply to The FloWatch Monitoring System must be Installed in accordance with the latest edition of BS5839 by a competent person.

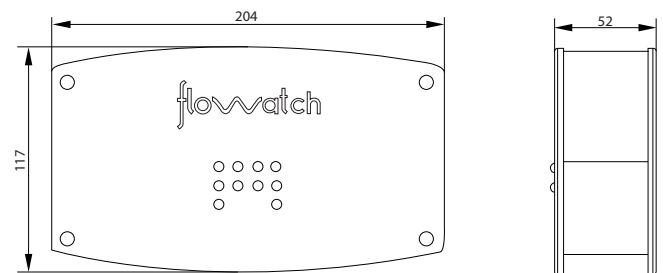Refer to FloWatch Installation, Operation and Maintenance manual for more information

## Ordering Codes

| Part No. | Description |
|---|---|
| RDFWM9251 | FloWatch Master Panel |
| RDFWEM4 | FloWatch 4 Way Expansion Module |
| RDFWEM8 | FloWatch 8 Way Expansion Module |



### FloWatch Master Panel Dimensions
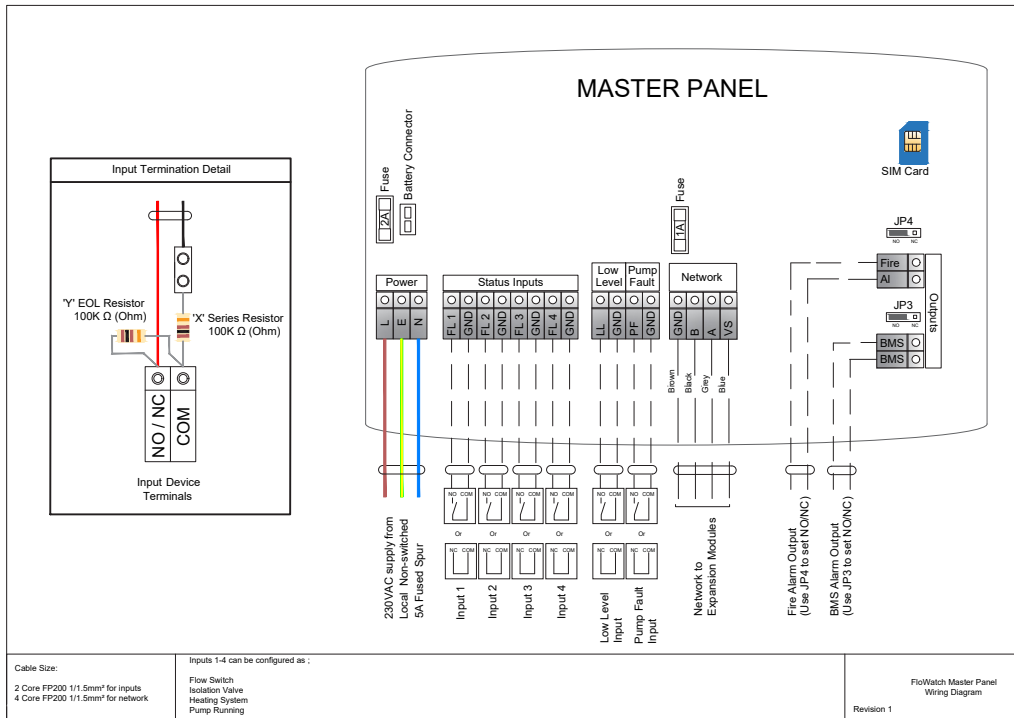


### FloWatch Expansion Modules Dimensions

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## Wiring Details for Master Unit



FloWatch Master Panel Wiring Diagram
Revision 1

## Wiring Details for Expansion Unit



FloWatch 8 Way Expansion Module Wiring Diagram
Revision 1