



# Data Sheet 7.33 Issue C

## Monitoring System FloWatch 9251 v2

### General Description

FloWatch is a monitoring system designed to meet the requirements of BS9251:2021 - Sprinkler systems for residential and domestic occupancies. It is suitable for single or multiple occupancy dwelling to monitor correct signalling of sprinkler system devices. 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.

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
- Record the alarm/fault

#### Online Remote Service - 4G connectivity (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
- View the alarm log history
- View Up to 10 FloWatch systems under a single login (Multi-site)

Note: For subscription information please contact FloWatch.

### FloWatch Monitored Devices (Inputs)

The FloWatch system monitors the following devices:

- Correct position of monitored isolation valves
- Water level switches in storage tanks
- Pump - output signal from pump, pump control or booster set
- Trace heating faults
- Other inputs - examples include PDV (Devices not specified in the standard)
- Supervisory faults (Short & Open circuits)
- Flow switches for sprinkler activation

Inputs can be either normally open or normally closed contacts (Changeable within the programming software)

FloWatch system is capable of monitoring up to 136 inputs.

### FloWatch Master Panel



#### Master Panel

- Monitor up to 8 inputs
- Local audible alarm (internal sounder)
- Visual identification (LCD screen message and LEDs)
- Expandable through installation of expansion modules
- Battery back-up (battery not supplied)
- Built-in GSM Sim for online remote service
- Enclosure tamper proof switch

### FloWatch Expansion Modules



#### Expansion Module

- 8 way expansion module allows connection of additional 8 inputs
- 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
- Enclosure tamper proof switch
- 8 way expansion units have built in temperature sensors to identify the temperature of the area of installation



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### LED Operation Table

Monitored Device	LED
Flow Switch	FIRE / FLOW ALARM
Pump	SYSTEM FAULT
Tank	SYSTEM FAULT
Isolation Valve	SYSTEM FAULT
Heating Fault	SYSTEM FAULT
Other	SYSTEM FAULT

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)

### Enclosure specification

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

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### Circuit Operation

FloWatch expansion modules can be wired as a Radial circuit (point to point) or Looped circuit (Return cable back to master panel).

### Installation

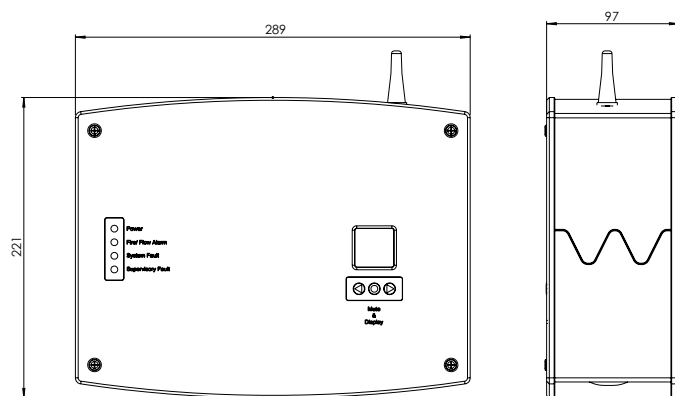
Power supply to the FloWatch Monitoring System must be Installed in accordance with the latest edition of BS5839 by a competent person. The system should be wired utilising FP200 1.5mm cable.

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

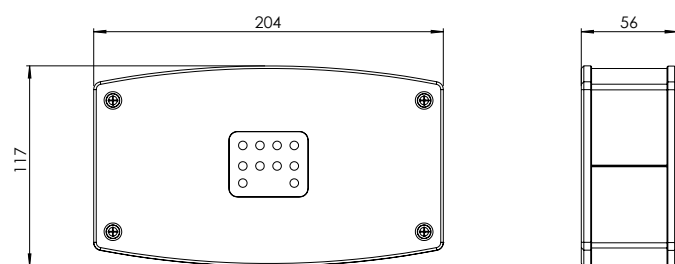
### Ordering Codes

Part No.	Description
RDFWMP9251	FloWatch Master Panel v2
RDFWEM8	FloWatch 8 Way Expansion Module

### FloWatch Master Panel Dimensions



### FloWatch Expansion Modules Dimensions



### Programming Software

FloWatch provide a user friendly Windows 10 based programming configurator software. Features include:

- Step by step programming
- Prompts during setup
- Easy navigation
- Colour coded system states
- Ability to add time delays to input groups
- Customise NO or NC wiring using a toggle selection tool
- Use of images for ease of programming

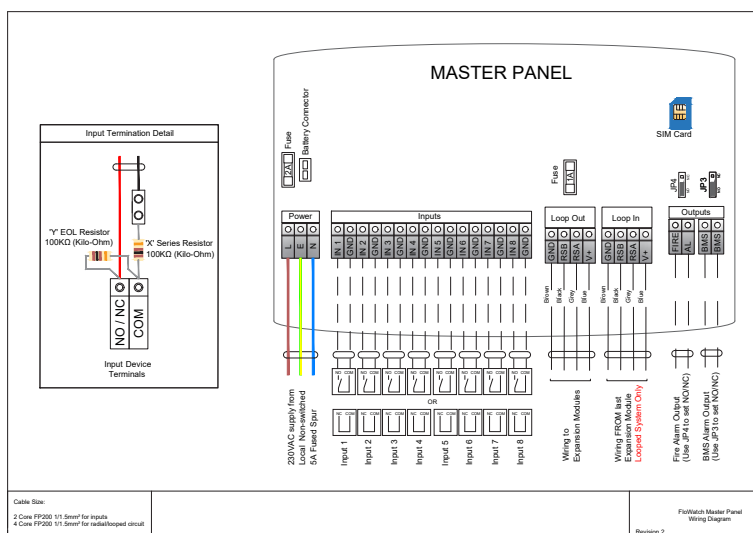
Note: The windows 10 based programming configurator is only designed for use with Master panels dated V2 on the internal circuit board.



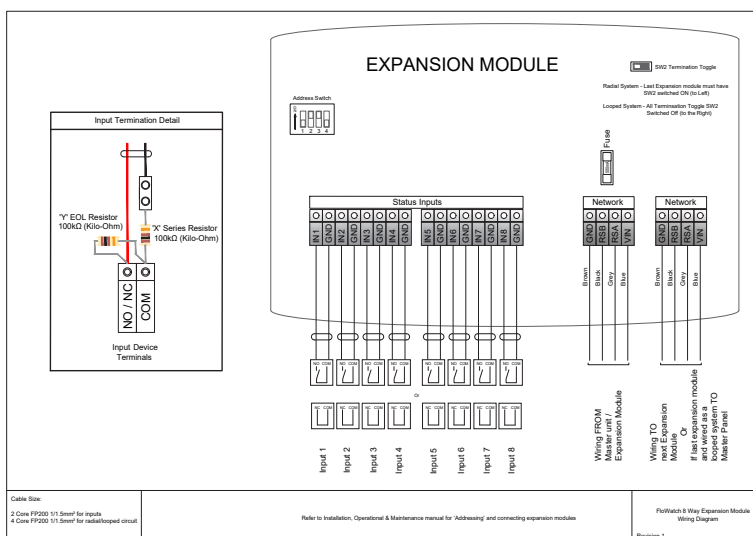
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### Wiring Details for Master Unit



### Wiring Details for Expansion Module



It is the responsibility of the sprinkler system designer to ensure that the specification and/or fire strategy element for the sprinkler system (see 4.2.2 of BS9251) is appropriate for the building and its occupancy.

#### RESPONSIBLE DISPOSAL

Rapidrop recommend that the product needs to be disposed of correctly when the product reaches the end of its life cycle.

- Disposal of business or commercial waste should be in compliance and accordance with government guidance and regulations
- Disposal of electrical waste should be in compliance and accordance with "Waste Electrical and Electronic Equipment recycling" (WEEE)

