



## Description

MClimate Flood Sensor is a compact flood sensor suitable for residential and commercial applications. If a flood is detected, data is immediately transmitted.

SKU: MC-LW-FLOOD

## Product features

- Flood detection
- Device tampering detection
- Temperature sensor
- Buzzer
- LED

## Applications

- Smart Buildings
- Smart home
- Residential buildings
- Commercial buildings
- Environment monitoring

## Device specifications

### Mechanical specifications

|            |            |
|------------|------------|
| WEIGHT     | 33gr       |
| DIMENSIONS | 70x70x19mm |
| ENCLOSURE  | ABS        |

### Operating conditions

|             |                           |
|-------------|---------------------------|
| TEMPERATURE | -20+60°C                  |
| HUMIDITY    | 0-80% RH (non-condensing) |

### Power supply

|                       |   |
|-----------------------|---|
| BATTERY TYPE          | CR123A  |
| OPERATING VOLTAGE     | 3VDC  |
| EXPECTED BATTERY LIFE | Up to 10 years (depending on configuration and environment) |

## Radio/Wireless

|                            |   |
|----------------------------|---|
| WIRELESS TECHNOLOGY        | LoRaWAN® 1.0.3  |
| WIRELESS SECURITY          | LoRaWAN® End-to-End encryption (AES-CTR)                            |
| LORAWAN DEVICE TYPE        | Class A End-device  |
| SUPPORTED LORAWAN FEATURES | OTAA, ADR, Adaptive Channels setup                                  |
| SUPPORTED LORAWAN REGIONS  | EU863 – 870; Other LoRaWAN regional settings available upon request |
| LINK BUDGET                | 130dB   |
| RF TRANSMIT POWER          | 14dB  |

## Communication protocol

| KEEPALIVE                          | BYTE INDEX | VALUE NAME   | DATA SIZE | NOTES   |
|------------------------------------|------------|--|-----------|---|
|                                    | 0x00       | Reason to send message + status  | 1         | Possible reasons: Keepalive; Device test switches; Flood detected; Tampering detected |
|                                    | 0x01       | Battery voltage  |           |   |
| UPLINK/DOWNLINK AVAILABLE REQUESTS |            | Read temperature<br>Activate LED (different modes available)<br>Activate Buzzer (different modes available)<br>Write acoustic flood alarm duration<br>Write keepalive period |           |   |

## Sensors

### Temperature

|            |       |
|------------|-------|
| RESOLUTION | 0,1°C |
| ACCURACY   | ±1°C  |