



# MCF-LW12TERPM

## LoRaWAN® outdoor PM and environmental sensor

This solar powered sensor reads temperature, humidity, pressure and PM (PM1, PM2.5, PM10) and sends collected data over the LoRaWAN® network. Ideally suited for a wide range of applications such as weather stations, urban monitoring, air quality, industrial, environmental or farming projects.

### Characteristics:

- CPU Cortex M0+
- EEPROM 32Kb
- Flash 64k
- Encryption AES 128 bit
- Class A LoRaWAN® stack
- Temperature  $-30 \div 70^{\circ}\text{C}$  ( $0 \div 65^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ )
- Humidity  $0\% \div 100\%$  ( $20\% \div 80\% \pm 3\%$  @ $25^{\circ}\text{C}$ ,  $0\% \div 20\% - 80\% \div 100\%$  @  $25^{\circ}\text{C} \pm 5\%$ )
- Pressure  $300 \div 1100\text{hPa}$  ( $\pm 1.0\text{hPa}$ )
- PM sensor PM1\PM2.5  $\pm 10\%$ , PM10  $\pm 30\%$
- NFC for IoT node setup, FW upgrade and data reading
- Wall or pole mounting
- Storage temperature range  $-30 + 80^{\circ}\text{C}$
- Working temperature range  $-30 + 60^{\circ}\text{C}$
- Protection class IP33
- Dimensions (approx) L x H X P: 210 x 310 x 200mm

### Applications:

- Weather Station
- Smart city
- Smart agriculture