



LoRaWAN[®] Outdoor Environmental Sensor PM1 PM2.5 PM10

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.



Temperature



Humidity



Pressure



PM 1.0-2.5-10



Solar Panel



Rechargeable Battery

Simple

Easy installation and set-up.



Smart

Ideal for smart cities. With **fine dust** sensor to measure air quality.

Flexible

All functions can be **configured remotely**, as well as via NFC with the App.



AUTONOMOUS. With solar panel and rechargeable battery.

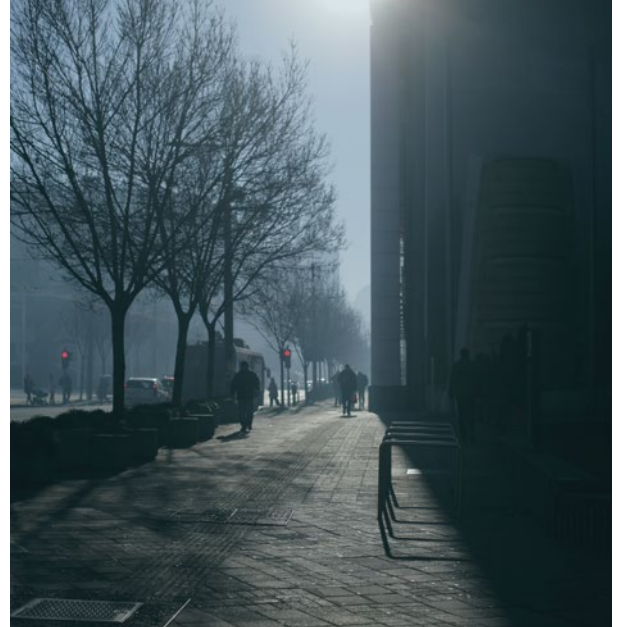
Up to 1 month of autonomy in no light. Backup battery as default.

MCF-LW12TERPM

LoRaWAN® Outdoor Environmental Sensor PM1 PM2.5 PM10

Applications

- Smart Agriculture
- Smart City
- Weather Station



Specifications

- CPU Cortex M0+
- EEPROM 32Kb
- Flash 64k
- Encryption AES 128 bit
- Class A LoRaWAN® stack EU868, AS923, AU915, US915
- Pressure 300 ÷ 1100hPa (± 1.0 hPa)
- Temperature $-10 \div 60^{\circ}\text{C}$ ($0 \div 60^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$)
- PM1\PM2.5 $\pm 10 \mu\text{g}/\text{m}^3$ (0 to 100 $\mu\text{g}/\text{m}^3$) or $\pm 10\%$ (100 to 1000 $\mu\text{g}/\text{m}^3$);
PM10 $\pm 25 \mu\text{g}/\text{m}^3$ (0 to 100 $\mu\text{g}/\text{m}^3$) or $\pm 25\%$ (100 to 1000 $\mu\text{g}/\text{m}^3$)
- Humidity 0% ÷ 95% (20% ÷ 80% $\pm 3\%$ @25°C, 0% ÷ 20%-80% ÷ 95% @ 25°C $\pm 5\%$)
- 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 $-10 + 60^{\circ}\text{C}$
- Protection class IP33
- Dimensions (approx) LxHxP: 210x310x200mm



MCF-LW12TERPM
official web page:



cod. EN013W01