



ATR50052

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 EU868, AS923, AU915, US915
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- Pressure 300 ÷ 1100hPa (± 1.0 hPa)
- Temperature -10 ÷ 60°C (0 ÷ 60°C ± 1.0 °C)
- PM1\PM2.5 ± 10 micro g/m³ (0 to 100 micro g/m³) or $\pm 10\%$ (100 to 1000 micro g/m³); PM10 ± 25 micro g/m³ (0 to 100 micro g/m³) or $\pm 25\%$ (100 to 1000 micro g/m³)
- 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°C
- Working temperature range -10 + 60°C
- Protection class IP33
- Dimensions (approx) L x H X P: 210 x 310 x 200mm

Applications:

- Weather Station
- Smart city
- Smart agriculture