

# AMBIENT SENSOR AMR - Wireless M-Bus

## Highlights

- Radio transmission of ambient temperature
- Wireless M-Bus protocol
- Range up to 300m
- LCD display
- Remote sensor version
- Up to 11 years of autonomy



The **AMR Ambient Sensor** from Adeunis RF is a ready-to-use room temperature transmitter.

The radio data transmission is conform to the **Wireless M-Bus protocol** which allows the integration of the Sensor into an architecture of consumption data collection.

The **AMR Ambient Sensor** from Adeunis RF is one of the most compact room temperature sensors, allowing discrete integration, even in individual units.

It is equipped with a **LCD screen**, displaying the real-time temperature measured for an immediate reading of values.

The Lithium battery allows a **11-year autonomy guaranteed with a periodicity of sending a measurement every 4 minutes**, the display being refreshed every 2 minutes.

The **AMR Ambient Sensor** from Adeunis RF is also available in **remote sensor** version. In this case, the two measured temperatures (internal and external probe) are displayed and sent simultaneously .

The radio emission of this data may also be protected by **AES128** encryption compliant with the **OMS standard**.

As for our AMR WMBUS range of products, the Ambient Sensor ensures a **full compatibility** with EN 13757-4: 2005 standard.

## Performances

RF radiated power: 10dBm (10mW)  
Range: up to 300m  
Frequency: 868.95MHz  
Wireless M-Bus mode: T1 (other on option)  
RF data rate: 100kbps

## Firmware

Measured temperature: from -30° to 85°C  
Precision : 0.1 to 0.5°C  
Measures history (management)  
AES128 encryption compliant OMS mode 5 (option)

## References

- **ARF8054AA** AMR AMBIENT SENSOR
- **ARF8054BA** AMR AMBIENT REMOTE SENSOR

## Warnings

Fraud detection (product opening)  
Battery end of life

## Consumption & needs

Max TX consumption: 35mA  
Operating voltage: 2 to 3.3 V  
Power supply: Li-MnO2 battery  
Lifespan: 11 years of operation

## General information

Storage temperature: -40°C / +85°C  
Dimensions: 78 x 39 x 30 mm  
Standards: EN300-220, EN301-489, EN13757-4:2005, OMS 3.0.1

- **ARF8055AA** AMR AMBIENT SENSOR / AES-OMS
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