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)

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

References
- ARF8054AA  AMR AMBIENT SENSOR
- ARF8054BA  AMR AMBIENT REMOTE SENSOR
- ARF8055AA  AMR AMBIENT SENSOR / AES-OMS
- ARF8055BA  AMR AMBIENT REMOTE SENSOR / AES-OMS