

# TEMPERATURE/HUMIDITY AMR-Wireless M-BUS

## DEVICE

The ambient temperature and humidity device from Lansen is a plug-and-play room temperature and humidity transmitter. Much care has been taken to design a sleek, good looking device with high security and performance. The design allows for discrete integration when mounted in home environment.

## PERFORMANCE

The device has a robust design with an tamper detection if opened from the wall. A bit in the status message is set if sabotage is detected or restored.

The battery level is continuously monitored and a low level warning is issued when battery is nearing depletion. For maximum performance the device has 2 internal antennas.

## TEMPERATURE SENSOR

The on-board temperature sensor is highly accurate with typical accuracy  $\pm 0,2$ .

## FIRMWARE

MODES	Configurable C, T or S
INTERVAL	Configurable 60s - 1 hour
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. Configurable ON/OFF, and KEY
STANDARD	T1-Mode, 90 seconds, Encryption ON.

## SENSORS

TEMPERATURE	RANGE: $-40^{\circ}$ to $+85^{\circ}$ ACC: $\pm 0,2$ at 0 to $+65^{\circ}$
HUMIDITY	ACC: $\pm 2\%$ RH at 20-80 % RH.

## WARNINGS

TAMPER DETECTION	Product opened or removed from the wall
BATTERY	Low battery

## POWER/LIFETIME

POWER SUPPLY	3.6V Li-SOCl <sub>2</sub> , AA battery
VOLTAGE	2.4 to 3.6V
LIFESPAN	14 years typical, depending on configuration and operating temperature.
RADIO	14 dBm output power to 2 differential antennas
BATTERY	Soldered or optional battery holder.

## GENERAL INFORMATION

STANDARDS	2014/53/EU (RED) EN 13757-3/4:2013, OMS 4.0.2
TEMPERATURE	$-40^{\circ}$ to $+85^{\circ}$
RELATIVE HUMIDITY	None condensing
MATERIAL	White, ABS
SIZE (W x L x D)	32 x 88,5 x 25,5mm

## HUMIDITY SENSOR

The on-board humidity sensor is highly accurate, with typical accuracy  $\pm 2\%$  RH.

## MEASUREMENTS

Temperature and humidity is sent at a configurable interval in minutes and the data is sent using the Wireless MBUS protocol OMS compliant. This makes the sensor ideal for integration in data collecting systems or drive by solutions.

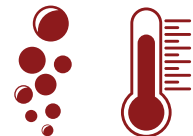
The data from the device could also be protected using the AES128 encryption compliant with OMS standard.

## CONFIGURATION

The MBUS mode, transmission interval and encryption can be configured using a USB configuration cable connected to a PC. The device can also in volume be ordered fully preconfigured.

## MOUNTING

The device is either mounted with adhesive tape or with screw



**M-Bus**  
wireless