

# Outdoor temperature / Humidity AMR-Wireless M-Bus

## DEVICE

The outdoor ambient temperature and humidity device from Lansen is a plug-and-play temperature and humidity transmitter. The device is made of highly durable PC plastic with highest accuracy on board temp and humidity sensor.

## PERFORMANCE

The internal radio antenna is optimized for 868Mhz and is tuned for mounting on concrete, wood or plaster. Each device have 2 antennas in each direction to maximize the range between the meter and the collectors. The battery level is continuously monitored and a low level warning is issued when battery is nearing depletion.

## FIRMWARE

MODES	Configurable C, T or S
INTERVAL	Configurable 60s - 1 hour
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. Can be ordered with custom configuration.
STANDARD	T1-Mode, 90 seconds Encryption ON.

## SENSORS

TEMPERATURE	RANGE: -40° to +85°
TYP ACC:	±0,2 at 0 to +85° ±0,3 at -40 to +85°
HUMIDITY	ACC: ±2 %RH Even better acc on request.

## WARNINGS

BATTERY	Low battery
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## POWER/LIFETIME

POWER SUPPLY	3.6V Li-SOCI2, ER17505 battery
VOLTAGE	2.4 to 3.6V
LIFESPAN	16 years typical, depending on configuration and operating temperature.
RADIO	16 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° to +85°
RELATIVE HUMIDITY	None condensing
COLOR	Signal White
MATERIAL	PC UV stabilized plastic
SIZE (W x H x D)	95 x 65 x 55 mm

## DEVICES

LAN-WMBUS-O-TH	Outdoor temperature and humidity sensor
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## TEMPERATURE SENSOR

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

## HUMIDITY SENSOR

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

## MEASUREMENTS

Temperature and humidity is send at a preconfigured interval 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 device complies with the OMS 4 synchronize message, sending the data pseudo random to avoid collisions.

## MOUNTING

The device is secured for water raining, using a membrane in the bottom of the device. The device should if possible be mounted protected from rain and sunlight. The device is started using a simple magnet so the enclosure does not need top be opened.

