

DEVICE

The ambient temperature and humidity device from Lanssen 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 innovative optical tamper detection function that will alert if the device is opened. 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	Selectable C, T or S
INTERVAL	Selectable 60s - 1 hour
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. Selectable ON/OFF, and KEY
STANDARD	T1-Mode, 90 seconds, Encryption ON.

SENSORS

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

WARNINGS

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

POWER/LIFETIME

POWER SUPPLY	ER14505 3.6V Li-SOCI2 battery.
VOLTAGE	2.4 to 3.6V
LIFESPAN	14 years expected*, standard 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
MATERIAL	White, ABS
SIZE (W x L x D)	32 x 88,5 x 25,5mm

OPERATING CONDITIONS

RADIO TRANSMITTER	Max: -30° to $+85^{\circ}$ Recommended $+5^{\circ}$ to $+50^{\circ}$
RELATIVE HUMIDITY	None condensing

DEVICES

LAN-WMBUS-C-TH	Ambient Sensor for temperature/humidity
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HUMIDITY SENSOR

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

MEASUREMENTS

Temperature and humidity is sent at a configurable interval 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 on newer devices 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 screws.



*The expected battery lifetime stated is based on simulations and true measurements at 25 gr C, and is valid to the best of our ability but not a guarantee. The calculations and measurements can be sent upon request for your reference.

Specifications in this document are subject to change without notice