

DEVICE

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

PERFORMANCE

The device has a robust design with an optional tamper detection if opened or removed 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.

TEMPERATURE SENSOR

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

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
MBUS DATA	Instant, Average hour, Average 24 hours.
STANDARD	T1-Mode, 90 seconds (5 min if ext probe is connected), Encryption ON.

SENSORS

TEMPERATURE	RANGE: -40° to $+85^{\circ}$ TYP ACC: $\pm 0,2$ at 5 to 65°
HUMIDITY	TYP ACC: ± 2 %RH at 20-80 % RH..
EXT PROBE	Supports One Wire DS18B20+ probes. RANGE: -55° to $+125^{\circ}$ ACC TYP: $\pm 0,5^{\circ}$

WARNINGS

TAMPER DETECTION	Product opened or removed from the wall (opt).
BATTERY	Low battery

POWER/LIFETIME

POWER SUPPLY	ER14505 3.6V Li-SOCI2 battery
VOLTAGE	2.4 to 3.6V
LIFESPAN	14 years typical, depending on configuration and operating temperature.
RADIO	14 dBm output power to antenna

GENERAL INFORMATION

STANDARDS	2014/53/EU (RED) EN 13757-3/4:2013, OMS 4.0.2
CASING	White, ABS, 25.5 x 105 x 22 mm

OPERATING CONDITIONS

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

DEVICES

LAN-WMBUS-G2-TH	Ambient Sensor for temperature/humidity with external probe support.
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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 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.

EXTERNAL PROBE

The device supports up to 4 external temperature probes connected to the device. The probes are automatically detected and configured at startup.

CONFIGURATION

The MBUS mode, transmission intervall and encryption can be configured using a USB configuration cable connected to a PC.

