

### 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 a tuned internal antenna.

### TEMPERATURE SENSOR

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

### FIRMWARE

MODES	C, T or S
INTERVAL	60s - 1 hour
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. ON/OFF, and custom KEY
STANDARD	C1-mode, 120 seconds, Encryption ON, unique key.

### SENSORS

TEMPERATURE	RANGE: $-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ TYP ACC: $\pm 0,2$ at 0 to $+65^{\circ}$
HUMIDITY	TYP 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	ER14505 3.6V Li-SOCI2 battery.
VOLTAGE	2.4 to 3.6V
LIFESPAN	14 years typical, standard configuration and operating temperature.
RADIO	14 dBm output power to antenna.
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	$+0^{\circ}$ to $+55^{\circ}\text{C}$ **
RELATIVE HUMIDITY	None condensing

### DEVICES

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

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

### MEASUREMENTS

Temperature and humidity is sent at a predefined 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 data from the device is also protected using the AES128 encryption compliant with OMS standard.

### CONFIGURATION

The device can be ordered with custom MBUS mode, transmission interval and encryption. An additional cost for this will typically be charged.

### MOUNTING

The device is either mounted with adhesive tape or with screws. The device with soldered battery is started using any standard magnet.

\*The pseudo random delay between each packet transmission is longer to make collision more unlikely compared to the OMS specification. Can in volume be ordered with standard delay.

\*\* Temperature outside this range can affect the possibility to receive data from the device.

