

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 temperature and humidity sensor.

PERFORMANCE

The internal radio antenna is optimized for 868Mhz and is tuned for mounting on concrete, wood or plaster. Each device has two antennas one 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. The sensor is not designed for operating in constant freezing temperature.

FIRMWARE

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|------------|---|
| MODES | C1-A/B, T1 or S1 (selectable on order) |
| INTERVAL | 90s. Can be ordered with custom interval (60s - 1hr) |
| ENCRYPTION | AES128 encryption OMS mode 5, Profile A. Can be ordered with custom configuration. |
| STANDARD | T1-Mode, 90 seconds. Encryption ON. |

SENSORS

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| TEMPERATURE | RANGE: -40° to +85°, 0-100 %RH |
| TYP ACC: | ±0,2° at 0° to +85° ±0,3° at -40° to +85° |
| HUMIDITY | TYP ACC: ±2 %RH Even better acc. on request. |

WARNINGS

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| BATTERY | Low battery |
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POWER/LIFETIME

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| POWER SUPPLY | ER17505 3.6V Li-SOCI2 battery |
| VOLTAGE | 2.4 to 3.6V |
| LIFESPAN | 16 years typical, standard configuration and operating temperature. |
| RADIO | 16 dBm output power to 2 differential antennas |
| BATTERY | Soldered. Can be ordered with battery holder. |

GENERAL INFORMATION

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| STANDARDS | 2014/53/EU (RED) EN 13757-3/4:2013, OMS 4.0.2 |
| MATERIAL | Signal white PC UV stabilized plastic |
| SIZE (W x H x D) | 95 x 65 x 55 mm |
| IP | 65 |

OPERATING CONDITIONS

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| RADIO TRANSMITTER | Max: -30° to + 85° Recommended -20° to +50° |
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DEVICES

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| LAN-WMBUS-O-TH | Outdoor temperature and humidity transmitter |
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TEMPERATURE SENSOR

The on-board temperature sensor is highly accurate with typical accuracy ±0,2°.

HUMIDITY SENSOR

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

MEASUREMENTS

Temperature and humidity is sent 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 M-Bus data contains current, average hour and average 24 hours.

The device complies with the OMS 4 synchronize message, sending the data pseudo random to avoid collisions.

INSTALLATION

The device is waterproof and resistant to raining water thanks to a membrane at the bottom of the device. The device should, if possible, still be mounted protected from rain and sunlight. The device is started using a simple magnet so the enclosure does not need to be opened.

