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# **CIN a 11W** Wireless M-Bus temperature and humidity sensor

The CMa11w is a wireless M-Bus communicating temperature and humidity sensor for indoor use. CMa11w complies with the OMS standard and operates in wireless M-Bus mode T1. CMa11w is easy to install, has a high accuracy and long life time, which make it the perfect choice for tenant owners when wiring is not an option.

# **TEMPERATURE AND HUMIDITY**

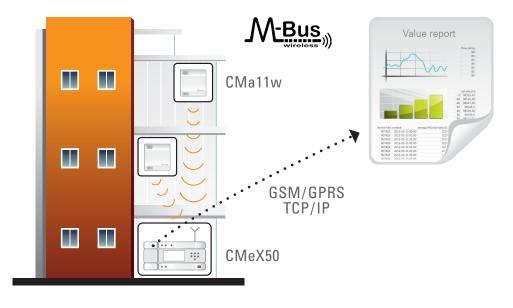
The CMa11w has a high accuracy temperature and humidity sensor, which will provide precise and fast readings. The precision meets the standards for measuring indoor climate.

# **COMFORT LEVEL BILLING**

There are many ways of billing residents for the energy used to heat the apartment/building. With the CMa11w, it is possible to apply comfort level billing, which means that the resident pays for a certain indoor temperature. The buildings total energy cost for heating can easily be divided in parts (sq m). The main goal is to give the residents a fair energy cost.

# WIRELESS M-BUS

Use the CMa11w together with a wireless M-Bus master when wiring is not an option. The CMa11w complies with the OMS standard and operates in wireless M-Bus mode T1. The CMa11w is easy to install and is equipped with a long-life battery, which will keep it running for up to 12 years.



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## **Mechanics**

| Casing material        | ABS UL94-V0, white |
|------------------------|--------------------|
| Protection class       | IP20               |
| Dimensions             | 80 x 80 x 28 mm    |
| Weight                 | 75 g               |
| Antenna Wireless M-Bus | Internal           |
| Mounting               | Wall mounted       |

#### **Electrical**

Power supply

# Environmental

| Operating temperature range | -20 °C to +55 °C             |
|-----------------------------|------------------------------|
| Storage temperature range   | -40 °C to +85 °C             |
| Operating humidity max      | 0 to 95 % RH no condensation |

Battery, 12 years

#### **Temperature sensor**

| Temperature range         | -20 °C to +55 °C |
|---------------------------|------------------|
| Temperature 10 to 30 °C   | +/- 0.2 °C       |
| Temperature 0 to 10 °C    | +/- 0.4 °C       |
| Temperature -10 to 0 °C   | +/- 0.5 °C       |
| Temperature -20 to +55 °C | +/- 1.5 °C       |

# **Humidity sensor**

| Humidity range         | 0-100 % RH   |
|------------------------|--------------|
| Repeatability RH       | +/- 0.1 % RH |
| Humidity 10 to 90 % RH | +/- 2 % RH   |
| Humidity 0 to 100 % RH | +/- 4 % RH   |

#### Wireless M-Bus

| M-Bus standard       | EN 13757-4, OMS compliant                  |
|----------------------|--|
| Wireless M-Bus modes | T1   |
| M-Bus commands       | SND_NR                                     |
| Values               | Temperature, humidity, min/max/<br>average |
| RF power             | 10 mW                                      |
| Sensitivity          | -104 dBm                                   |
| Range                | Up to 600 M                                |
| Frequency            | 868 MHz                                    |

# **Approvals**

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