

► Brunata FuturaComfort+

Electronic comfort meter for measuring room temperature or exterior temperature

- Measures the current temperature via either internal sensor or remote sensor
- Shows the temperature in °C with one (1) decimal on the display
- The range of measurement at the standard setting is -25 °C to +100 °C (248.2 K to 373.2 K with a resolution of 0.1 K)
- Supplied with radio transmitter module for remote reading as standard, but can also be supplied without this module
- Carries out measurement every second minute



Data stored in the memory

Values for the 1st and 15th of every month are stored in the meter's memory. In total, data for 52 log periods are stored, corresponding to data for 26 months.

The following data are stored for each period:

- The average temperature for the current period
- The average temperature for the previous period
- The average temperature for the last 24 hours of the period
- The average temperature for the previous 24 hours of the period

All temperatures are stored in Kelvin with a resolution of 0.1 K.

With or without radio transmitter

FuturaComfort+ is supplied with a radio transmitter allowing remote reading as standard. When the meter is read remotely, the full development of the measured temperatures can be seen. However, the meter can also be supplied without radio transmitter. In that case, it is read by hand terminal, typically once a year.

Comfort measurement

Heating accounts can be based on comfort measurements in the following way:

The degree day figure G is calculated for every room in a building. For any given period, this is calculated as the difference between the average interior and exterior temperatures, multiplied by the number of days, d, i.e.

$$G = (t_{\text{int}} - t_{\text{ext}}) * d$$

The comfort figure K is calculated as $K = G * A$, where A is the room area.

The individual consumers' total comfort figures (the sum of the comfort figures for the rooms at the consumer's disposal) divided by the sum of all comfort figures for the building can now be used as a key for heat cost allocation.

Example: Assume that the consumer NN has three rooms at his disposal with the comfort figures K_1 , K_2 and K_3 , that the sum of comfort figures for the building is K_{total} and that the room heating cost for the building is B_{total} .

NN will then have to pay the following amount for his room heating:

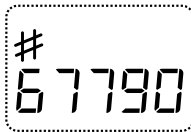
$$B_{\text{NN}} = ((K_1 + K_2 + K_3) / K_{\text{total}}) * B_{\text{total}}$$

Brunata is a 100 % Danish owned company. We have more than 90 years of experience within developing and producing heat cost allocators and heating accounts. Brunata als has implemented a quality system in accordance with EN ISO 9001. Please contact us for further information on our products.

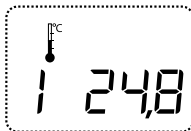
Easy-to-read display

The comfort meter is easy to read. The following information is shown alternately in °C with one decimal on the display:

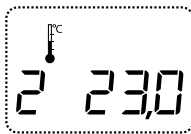
Meter number



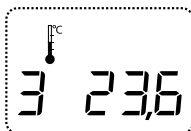
Display reading 1 shows the current temperature from the latest measurement



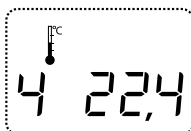
Display reading 2 shows the average temperature for the current 24 hours



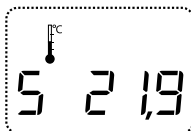
Display reading 3 shows the average temperature for the previous 24 hours



Display reading 4 shows the average temperature for the current fortnight



Display reading 5 shows the average temperature for the previous fortnight



Radio telegram

Meters with radio transmitter transmit a number of selected data at regular intervals:

- Meter number
- Current temperature from the latest measurement
- Average temperature for the previous 24 hours
- Average temperature for the current fortnight
- Average temperature for the previous fortnight

All temperatures are transmitted in Kelvin with a resolution of 0.1K.

Replaceable batteries

FuturaComfort+ is supplied with a replaceable lithium battery. The meter can be set to different transmission frequencies. With a telegram transmission frequency of every 30 minutes, the expected life of the battery is over ten years.

Technical information

Minimum distance

from radio transmitter: 1 m

Size and weight: 131 x 39 x 19 mm, approx. 65 g

Battery:

Replaceable lithium battery with an expected life of at least ten years at telegram transmission intervals of 30 minutes.

Transmission frequency

Brunata FuturaComfort+ sends a telegram every 15th minute.

Brunata FuturaComfort+ ver2 sends a telegram every 2nd minute.

Protocol

Brunata FuturaComfort+ use BrunataNet protocol

Brunata FuturaComfort+ ver2 use BrunataNet ver2 protocol