

## ioLiving Repeater signal amplifier



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The ioLiving repeater is a signal amplifier and it doubles the range of the LoRa radio signal. Repeater allows the measurement device using the LoRa radio signal to be located further away from the Gateway.

- The device is splashproof.
- Operating temperature -25°C - 60°C.
- Operates on mains power (AC 100 – 240V)
- The LoRa frequency is 871.5 MHz in Europe.



## Intended use

The ioLiving Repeater can be used to increase the range of the LoRa radio signal. The device repeats messages sent by measurement devices, therefore it doubles the number of LoRa signals in the operating environment. Radio equipment requirements limit the number of LoRa signals, and the repeater is designed to narrow down its operation when there are several (more than 10) measurement devices around it. This must be considered when planning the location of the device since it repeats all the received LoRa messages. There are no internal memory in the Repeater, it only transmits real time messages. The repeaters can not be daisy-chained because the device does not repeat already repeated messages.

## Deploying the ioLiving Repeater

- The device does not require any configuration.
- There can be up to four Repeaters in the vicinity of one Gateway.
- The LoRa scanner and LoRa Beacon test transmitter can be used to find the optimal location for the Repeater.
- With the correct location of the Repeater, structures that block the radio signal can be bypassed.
- The device can be mounted on a table or wall. It can also be installed outdoors, if protected from direct rain. The position of the device has no effect on its operation.
- The device is switched on by connecting it to the mains. Make sure that the planned location has available power socket.

## Signal light operation

- The signal light on the device indicates the operation.
- When the device is switched on, the green signal light turns on.
- The signal light turns on and off alternately when the device is repeating messages.
- If the signal light is on or off constantly for a longer time, the device may be defective or not plugged in. This may also be due to that there is no LoRa measuring device within range of the Repeater.

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