

# Your immediate access to digitalisation with the LoRa® based radio module

The digitisation of networks offers utilities the opportunity to reorient their business model, to optimise internal processes and customer service as well as to increase system efficiency.

In future, the consumption data for heat will also be automatically read out over long range stationary wireless networks, within minutes and over long distances.

## WZU-LR: LoRa® based radio module

The compact LoRa® radio module for T550 thermal energy meters, is backward-compatible, meaning that an immediate and complete switch to the new technology is possible by upgrading all existing meters in the field.

The meter data will be sent automatically and encrypted via LoRaWAN® network and will be available for individual and accurate billing or for optimising system efficiency.

Your access to »district heating networks 4.0« can be implemented immediately and allows you:

- Network automation and -management
- Improved error analysis
- Optimised fault management

## Your Benefits

- Retrofit of installed meters
- Automated data transfer
- Avoid reading errors
- Improvement of data quality and quantity
- Long range
- Open standard - interoperabel
- High network stability and data transmission security

## WZU-LR / W ZU-LR-EXT



### Simple activation

After the module has been integrated in the meter and started by pressing the button or with the free app, it connects automatically to the LoRaWAN® network and initiates meter data transfer.

### More data

Due to the power-saving nature of the LoRa® based module, data can be read out in shorter intervals and is used to improve system efficiency.

### Flexibility

You have the choice between two module types:

1. with internal antenna
2. with external antenna

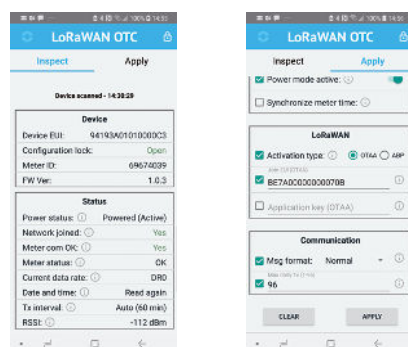
(Swivel antenna with magnetic foot or wall mount antenna)

### Energy saving

The energy consumption during radio transmission is minimal, so the technology is suitable for D-cell operated meters. (e.g. 11 years battery life time at transmission interval of 60 minutes)

### Effortless “one-touch” configuration or inspection

With the free app or downlink data, the module can be reset easily. The transmission from the smart phone to the module is contactless via NFC. (Near Field Control).



## Technical Data

### General

Dimensions (w x h x d)	80 mm x 38 mm x 23 mm
Protection class	IP54 (EN 60259)
EMC approval	EN 301 489-1, EN 301 489-3

### Module characteristics

Device class	Class A, bi-directional
LoRa® version	1.0
Activation	OTAA or ABP
Data rate	DR0-DR5 (250–5470 Bit/s)

### Radio characteristics

Frequency	868 MHz
Output Power	14 dBm
Receiver sensitivity	-135 dBm

### Electrical Data

Nominal Voltage	3.0 - 5.0 VDC
Power Consumption (max)	40 mA
Power consumption (sleep mode)	2.5 µA

## Immediate Access Possible

### Plug & Ready

For retrofitting, plug the module into slot 2, switch on, ready.

T550 (UH50...)

T550 (UC50...)



from SW-version 5.15



from SW-version 8.06