

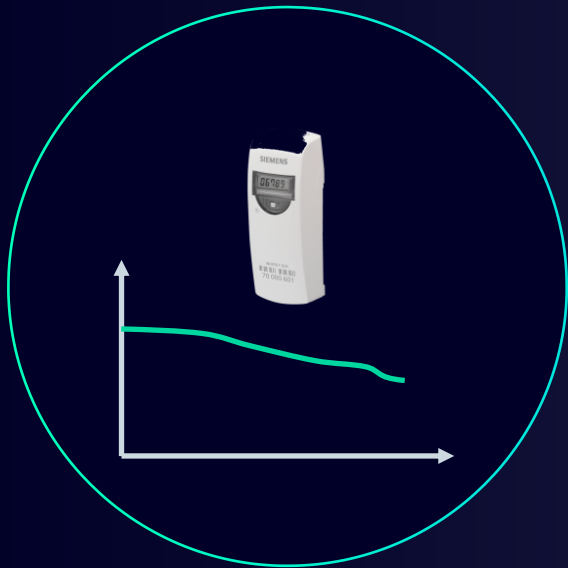
# Siemens meters and metering solutions

October 2022

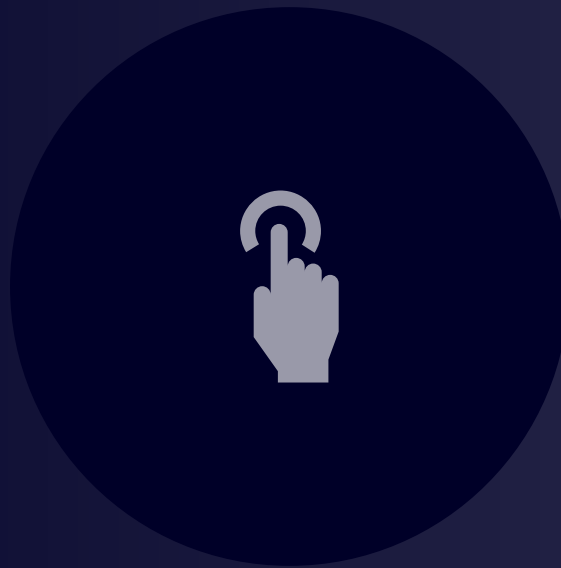


# Why use meters?

Measure →  
pay for what you use!



Energy is used  
more consciously



Save energy:  
**save money!**



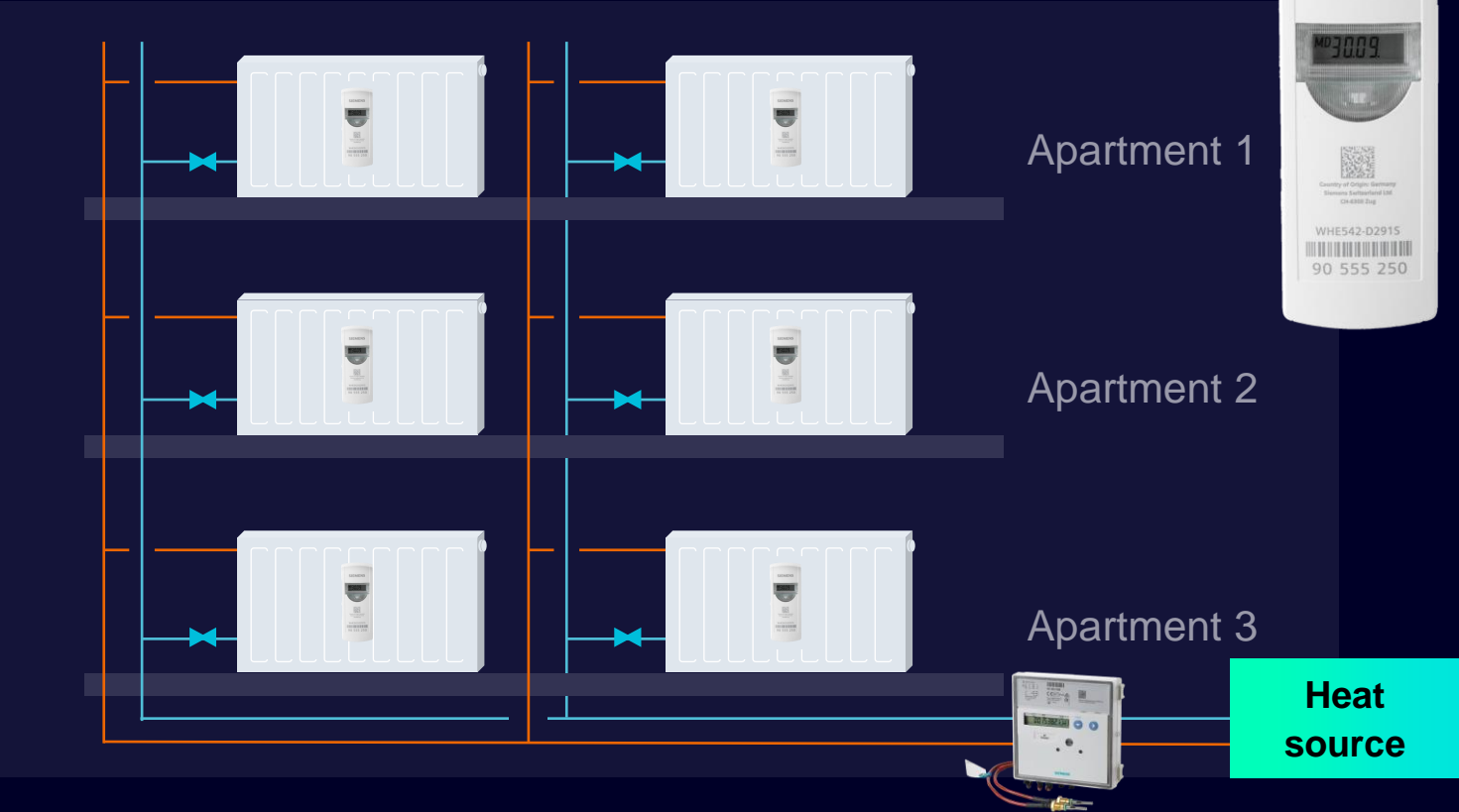
Lower  
CO<sub>2</sub> emissions



# Heat cost allocators

For vertical heating pipes

To measure, you need a meter on every radiator



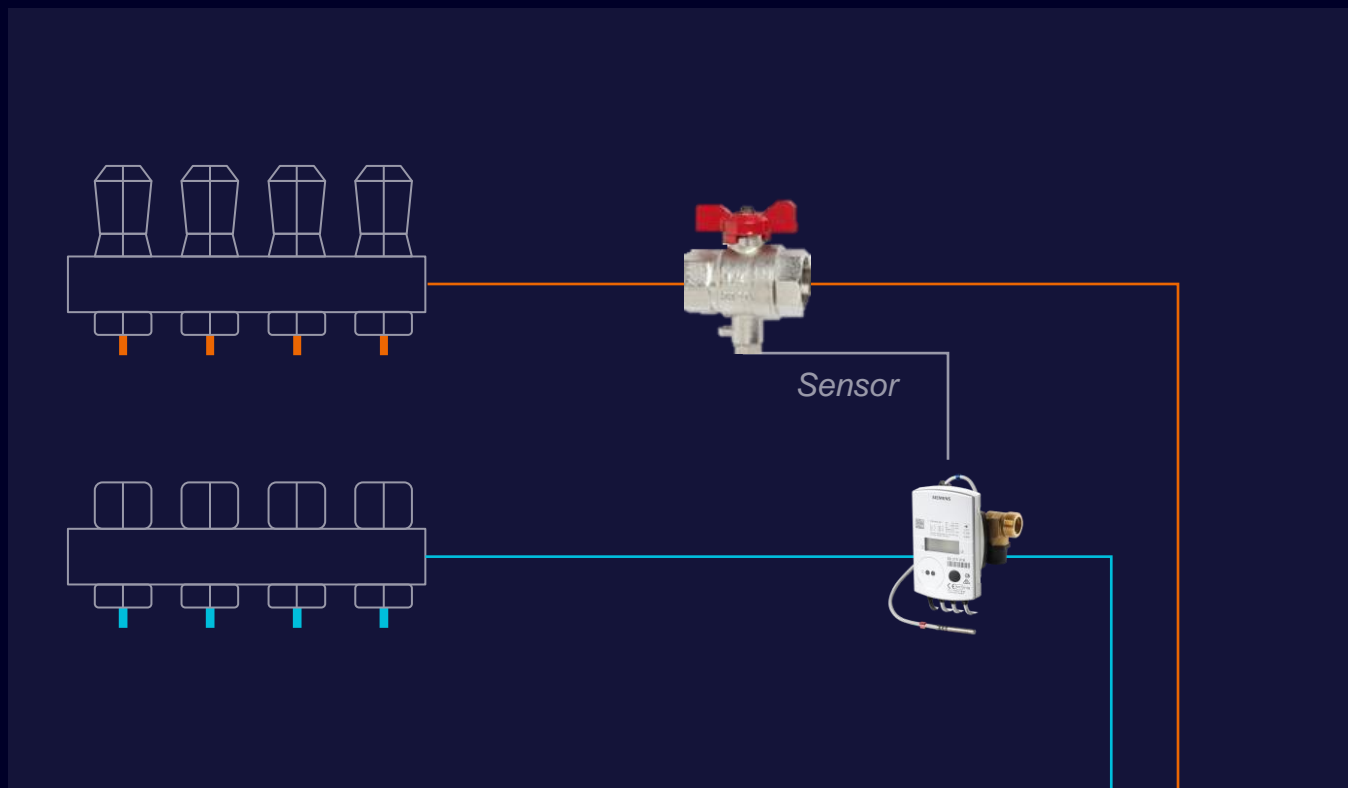
## Highlights

- Tenant pays only for what they use
- Maintenance-free; 10 years
- No need to enter apartment

## Heat meters

For horizontal heating pipes

Horizontal hydraulic system (apartment by apartment)



## Highlights

Only one meter per apartment

Tenant pays only for what they use

# Measuring devices Portfolio

## Water

Mechanical & Electronic  
WF.30.../WF.240.../WF.636...

## Heat and cooling energy

Impeller type WF.5.../WF.6...

Ultrasonic types:  
WS.5.../WS.6...

WS.8...

UH50...

MID approval

## SITRANS

### Residential

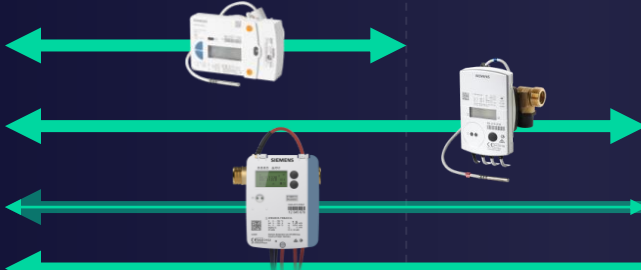
0.6 ... 2.5 m<sup>3</sup>/h

Drinking water



### Crossfunctional

3.5 ... 10 m<sup>3</sup>/h



### Commercial

15 ... 60 m<sup>3</sup>/h



### Industrial

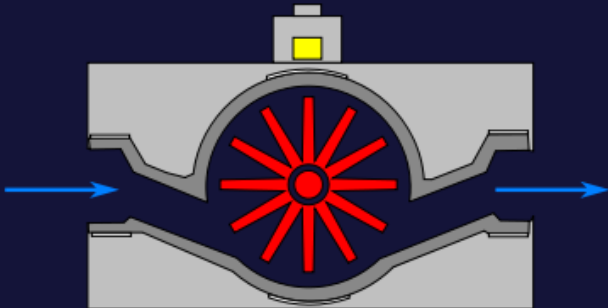
> 100 m<sup>3</sup>/h



# Heat meters Portfolio

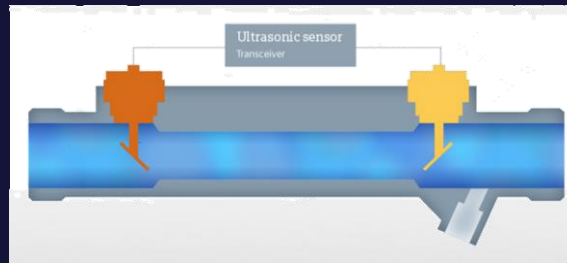
## Impeller type meters

Range: 0.6 ... 2.5 m<sup>3</sup>/h



## Ultrasonic meters

Range: 0.6 ... 150 m<sup>3</sup>/h



# Ultrasonic Heat Meters

are more expensive but ...

... they have advantages

Less soiling

(due to dirt particles in heating water)

Greater measurement range:

0.6 ... 150 m<sup>3</sup>/h

Lower pressure drop

→ lower operating cost

So, ultrasonic heat meters are more expensive but have a lower through life cost

# Water meters

## Communication modules

The mechanical water meters can be equipped with different types of communication modules at any time

M-bus

AMR walk-by radio

Reed contact

Reed contact & NAMUR

Add-on communication modules for different integration options

# Highlights

Flexible integration options

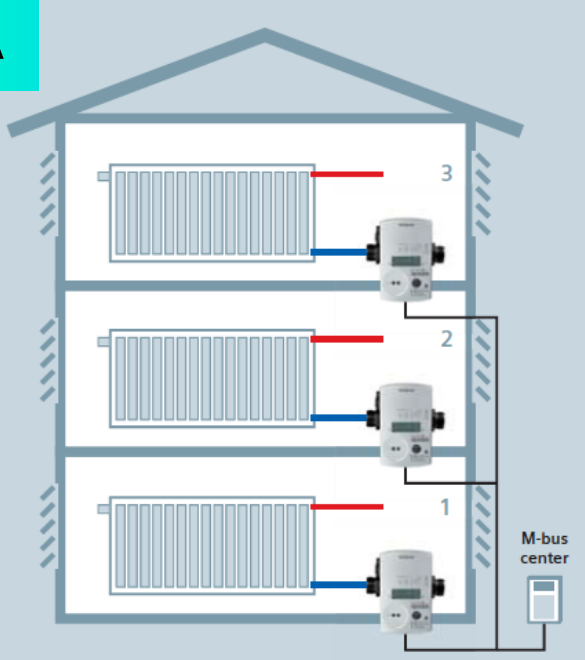
Transparent billing

Tamper-proof<sup>1</sup>

<sup>1</sup> E.g., Use a magnet to stop the impeller, but water still flows

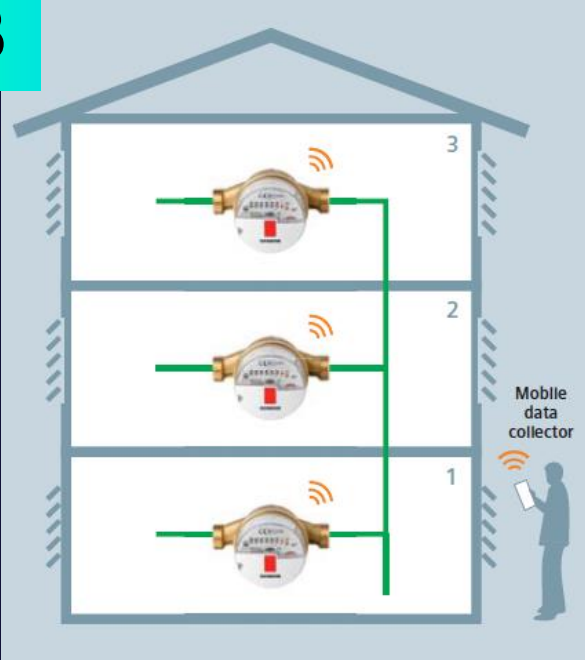
# Communication Types

**A**



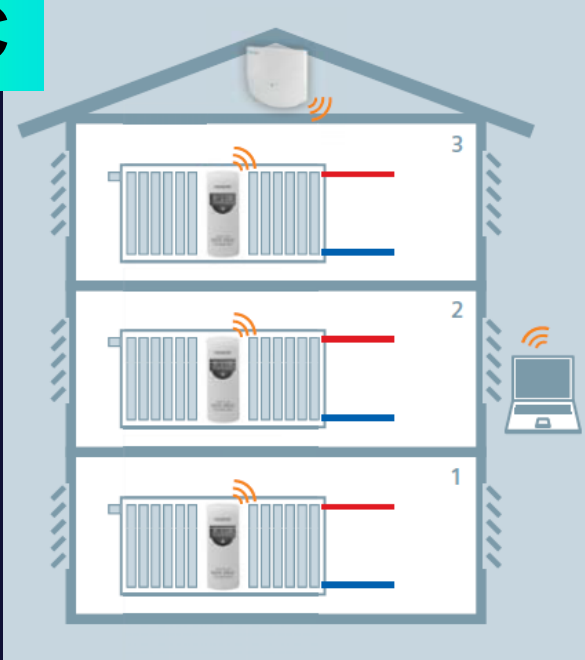
M-bus: Data collection via the M-bus Master using a two-wire bus

**B**



Walk-by: Radio retrieval with a mobile data collector

**C**



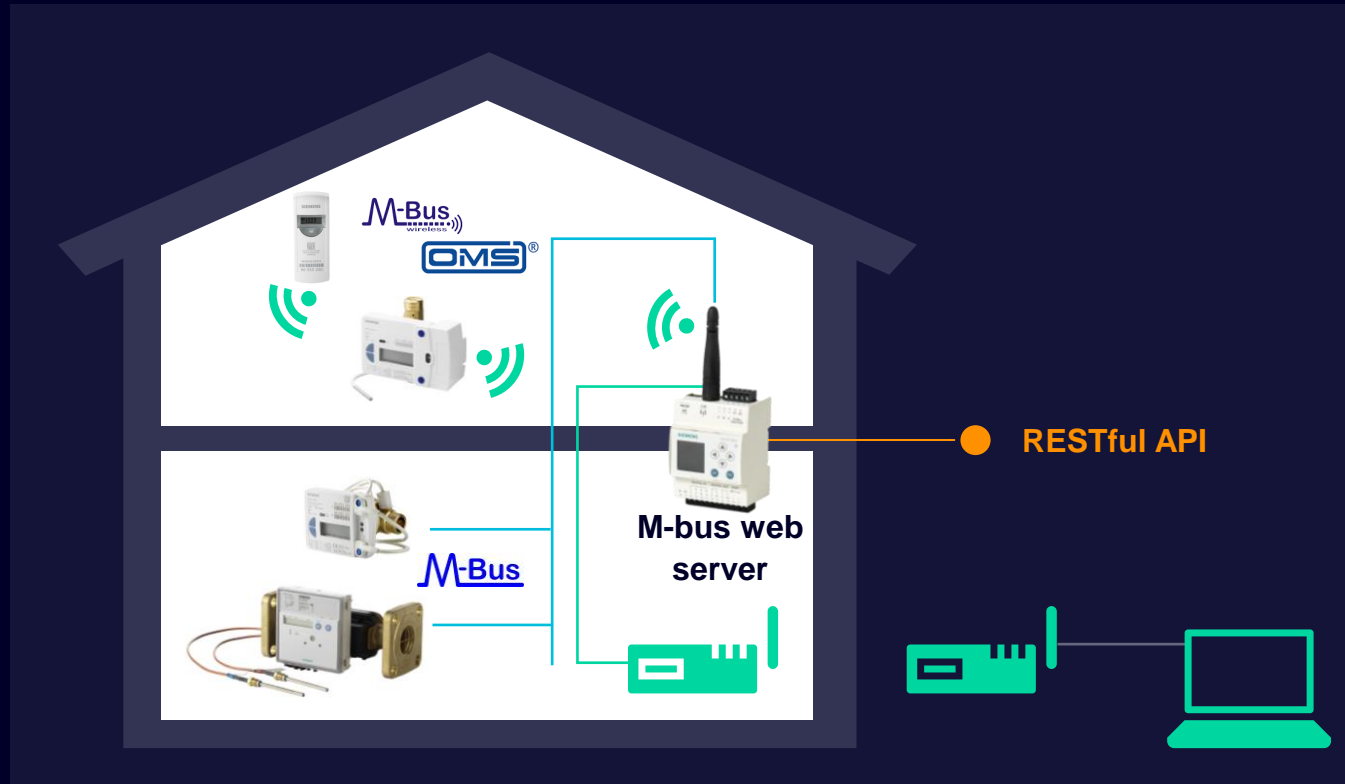
AMR: Automatic Meter Reading from remote location, using data collector fitted on-site



# Communication

Remote readout at any time via M-bus master

Horizontal hydraulic system (apartment by apartment)



## Highlights

M-bus wired and radio (RF)

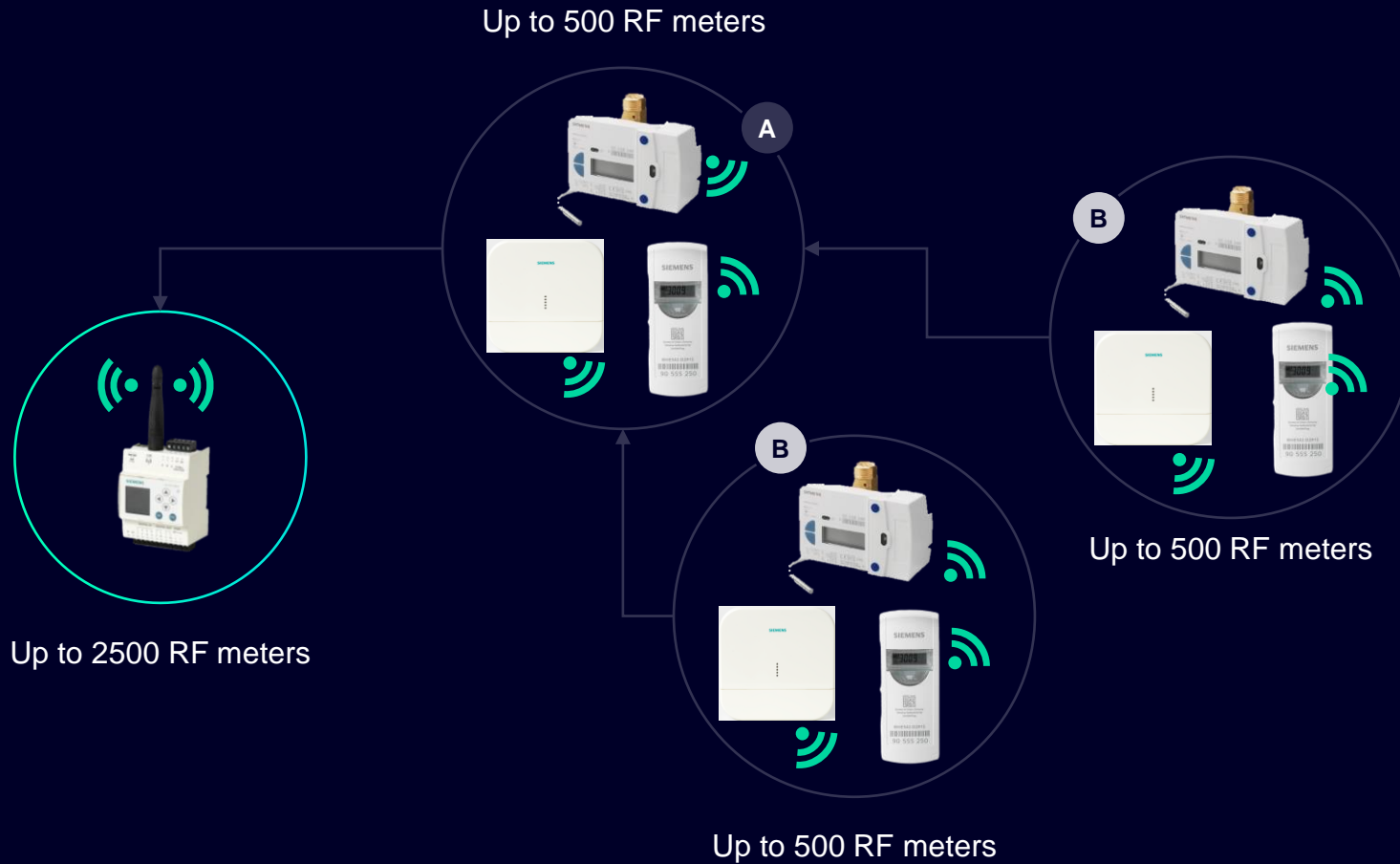
Easy commissioning and readout

Up to 500 M-bus wired meters can be connected to an M-bus web server

Up to 2'500 M-bus RF meters can be connected to an M-bus web server

RESTful API

# Communication – Remote readout at any time via M-bus master with Radio MESH network



A is the repeater for B

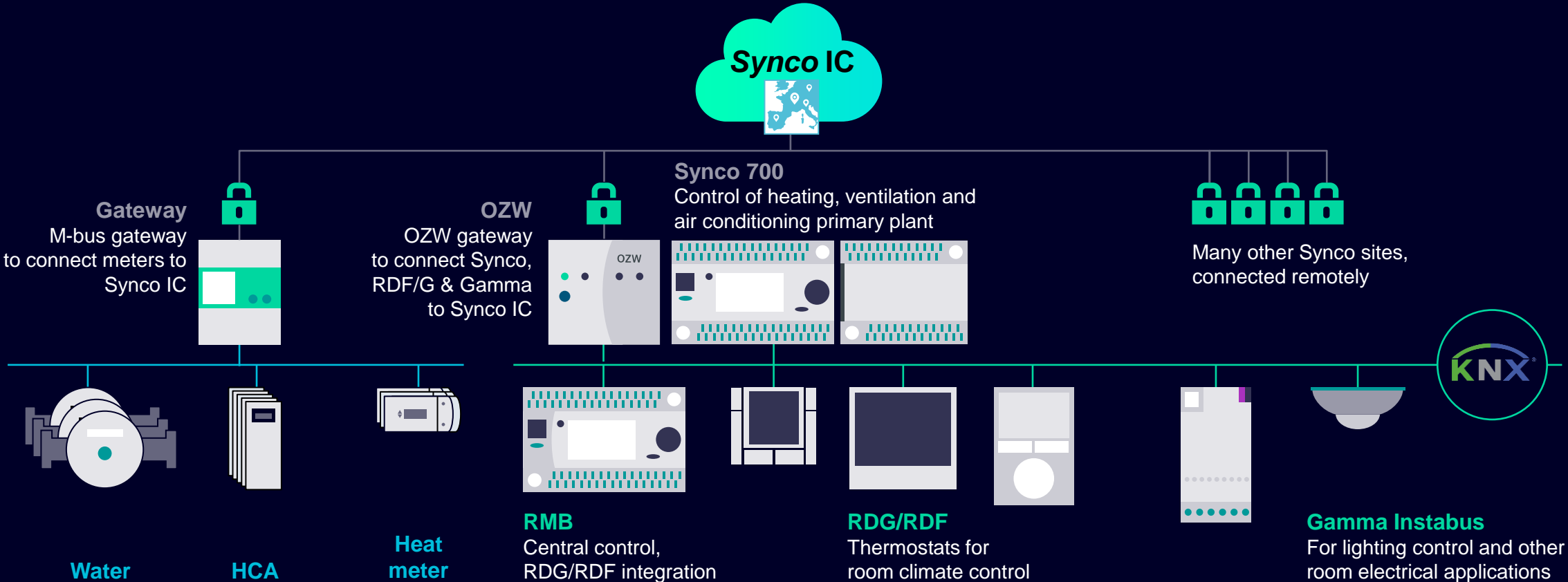
Every RF converter collects the consumption values of a max. of **500 wireless meters**.

A RF converter works as a **repeater** for another RF converter.

Up to **2'500 RF meters** and **23 RF convert-ers** can be handled by one web server.

# Syncro IC with Energy Monitoring

Combined metering and remote HVAC plant operation enables Facility Managers continually to reduce energy



# Benefit

Complete metering solutions from Siemens

Water meters



Heat cost allocators



Data collectors and Software



Ultrasonic meters

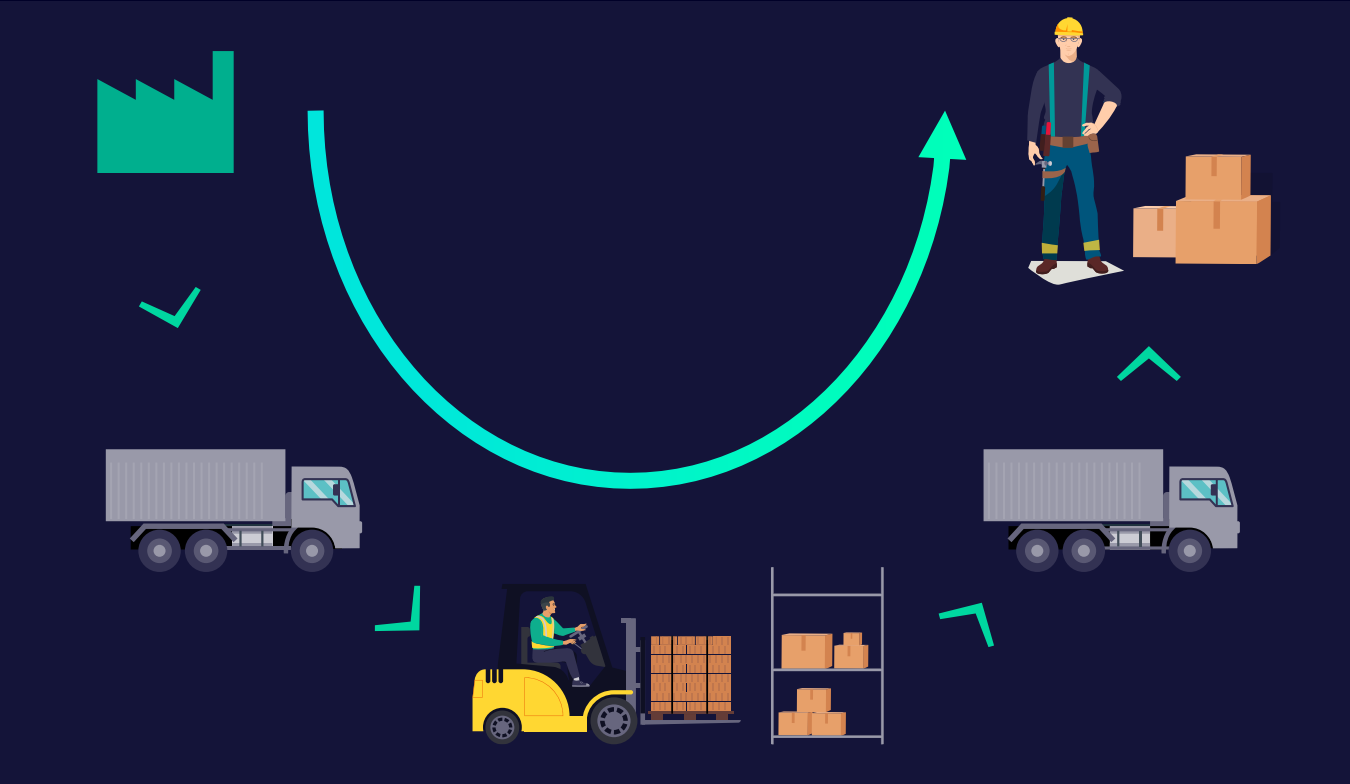


Impeller type meters

# Highlights

All products and software tools needed for a complete metering solution.

# Benefit



# Short delivery times

Very short lead times.

High level of availability of products thanks to good **stock management**.

# Benefit

Siemens your competent partner for quality and service

## Investment protection

due to long product life and very low failure rate



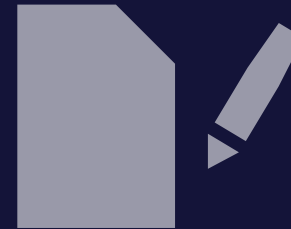
## Low risk

as Siemens supports on-site for planning and implementation



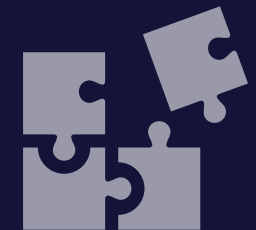
## Future-proof technology

as Siemens leads in international standardization



## Supplier independent

as Siemens uses Open standards



# Benefit – Complete offering from Siemens

## Single source supplier



All metering and HVAC control products from a single source → One contact; one warranty partner