Wattsense®

- ## LoRaWAN
  # BACnet
  # Modbus

DEVICES — LoRaWAN

OBJECTS — BACnet / Modbus

BMS

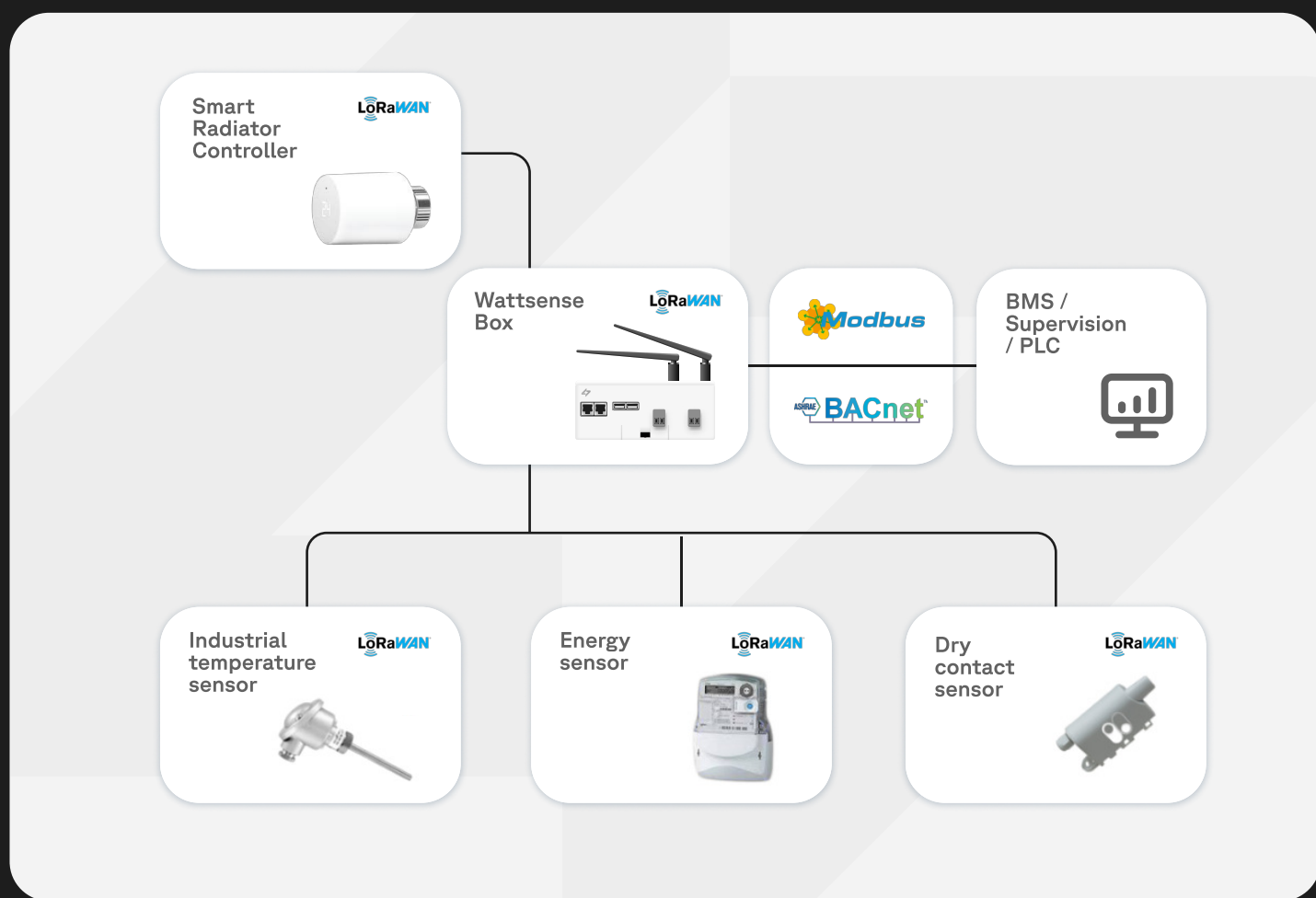## Access the data of any LoRaWAN Sensor in two clicks

Quickly connect LoRaWAN sensors using the Wattsense IoT solution. No coding or programming skills are required, just the click of a button!

Make LoRAWAN data readable by any management systems such as SCADA, PLC, or a BMS by converting it into BACnet IP and Modbus TCP IP.

How does it work?

Connect any LoRaWan sensor to a Wattsense gateway via our intuitive online user console.

Smart Radiator Controller — LoRaWAN

Wattsense Box — LoRaWAN

Modbus

BACnet

BMS / Supervision / PLC

Industrial temperature sensor — LoRaWAN

Energy sensor — LoRaWAN

Dry contact sensor — LoRaWAN

Our IoT solution locally processes raw LoRaWAN frames, decodes them, extracts the data points you selected and sends them directly into a Wattsense Box. The values can be then be easily converted to BACnet IP or Mobus TCP/IP where you define the register adress.

The Advantages

- No coding technology. Anybody can do it.
- Local process. No internet required.
- Immediate process. No latency or reboot needed.

Depending on your project's technical specifications, you can use:

The Tower is a remotely managed IoT device that controls equipment, collects data and communicates via the Wattsense server.

The Bridge is an IoT gateway and powerful controller designed for on-premises building management. There is no communication with the Wattsense server except for software updates.

SIMPLE TO USE
Connect devices to a management system in just a few clicks with our Configuration Wizard and quick network setup.

QUICK ROI
Stand out from competitors by reducing integration time, lower your upfront investment and win more contracts.

LOCALLY PROCESS DATA
Connect and manage LoRaWAN sensors, decode, and extract useful information without connecting to an external provider or Cloud.

LORAWAN SERVER INTEGRATED
All of this is possible thanks to a unique integrated LoRaWAN server and an embedded codec manager able to decode a wide range of sensors.

Hardware

- CPU: 528MHz ARM Cortex A7
- Memory: 512MB RAM
- Storage: 4GB Flash
- Consumption: 5W
- Dimensions: 160 x 110 x 55 mm
- Weight: 350g - 385g with antennas
- IP code: IP2X
- Operating temperature: from 0°C to +45°C
- Humidity: From 5% to 95% humidity – No condensation
- Mounting:
  - DIN rail Omega profile (TN35)
  - DIN 1015 / 1070 / 3070
  - Wall mounted (2 screws)

Interfaces

- 1x Modem 3/4G
- 1x Module LoRaWAN from 863MHz to 928MHz
- 2x Ethernet
- 2x RS485
- 2x USB
- 1x Micro USB
- 1x KNX
- 1x M-Bus (3UL Max.)
- 1x X-Bus (LPB)

Software

- Secured Linux Yocto distribution
- Built-in drivers for all buses, protocols, and building equipment
- Automatic discovery of equipment on BACnet
- Remote and automated configuration
- Secure server communication via MQTT. Automatic and secure software updates.

Drivers

- BACnet IP
- BACnet IP Server
- Diematic
- KNX S and LTE
- LON IP-852
- LPB
- LoRaWAN 1.0 Local private – Frequency plans supported: WSG-EU-SC-00-14 : EU863-870, IN865-867, WSG-NA-SC-00-14 :US902-928, AS923-925, AU915-928
- M-Bus (3UL Max.)
- Modbus RTU
- Modbus TCP/IP
- Modbus TCP/IP Server
- MQTTT Client