

IQ Home Gateway

Using gateway in Industrial and Smart City Solutions

Who we are:

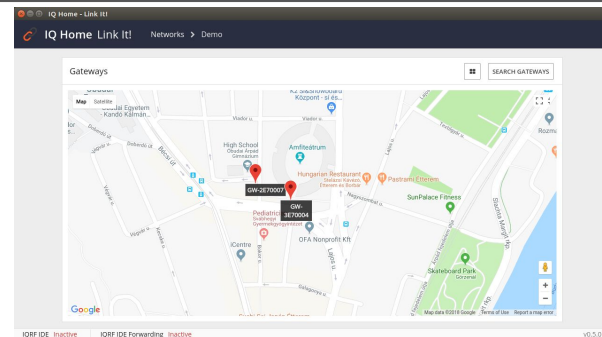
- Company founded by university researchers.
- Company was founded at 2013

What we do:

- Developing easy to use and customizable building blocks for wireless automation



IQ Home Ecosystem - The IQRF Lego cubes





iQ Home Ecosystem

Cloud
Services &
Custom
Solutions



MQTT

iQ Home
Gateways



IQRF DPA

IQRF DPA
Field
Devices



Gateway Main Design Concepts

- To have stable and reliable gateway
- To have built-in security
- To be usable in outdoor usage
- To be usable in industrial environment
- To be usable without fix power supply
- To have Ethernet and LTE connectivity
- Easy to configure and set-up
- To have MQTT protocol support
- To have remote management possibility



About the reliability....

99.9%
availability

Based on long term test by

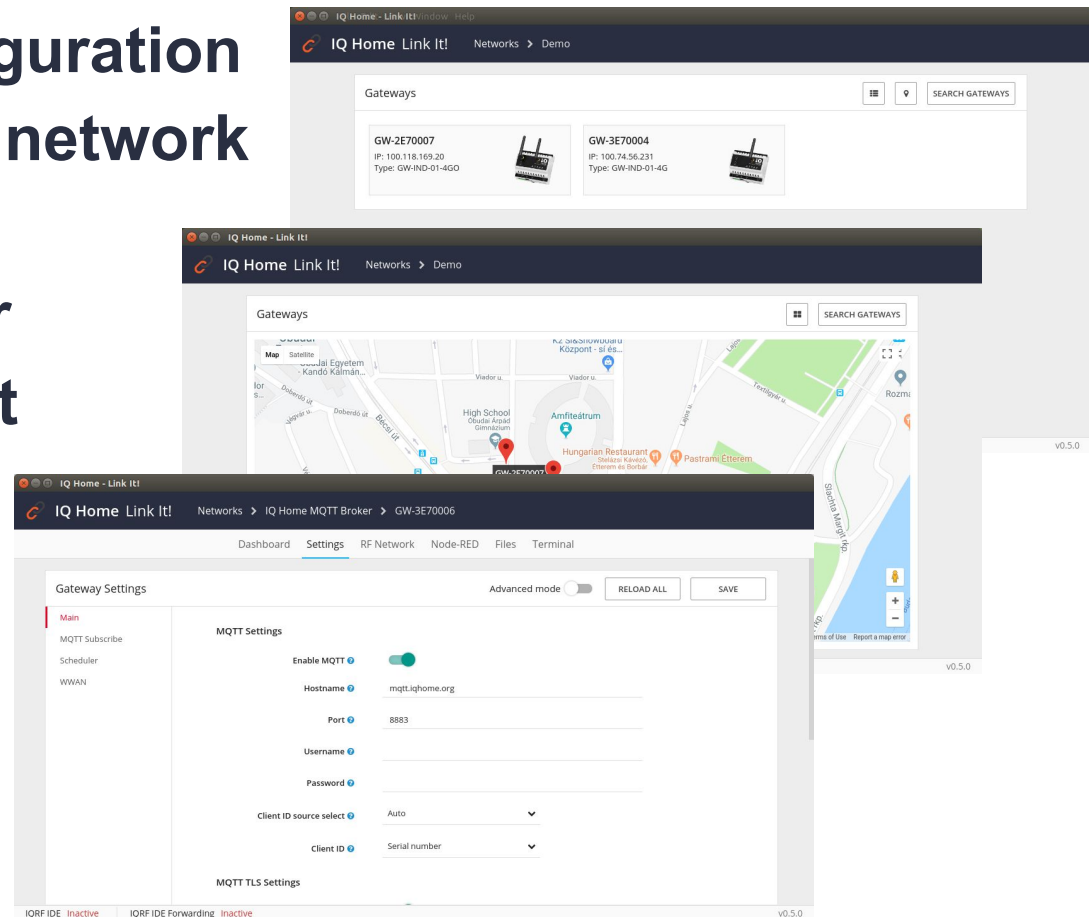
T - Systems

- **Data storage**
 - Basic file system and the sensitive configuration data are stored duplicated with automatic self-repair functionality
- **Connectivity**
 - Duplicated data connection
 - Ethernet
 - LTE / 4G
- **Power**
 - Li-Ion based battery backup
 - Solar power input possibility

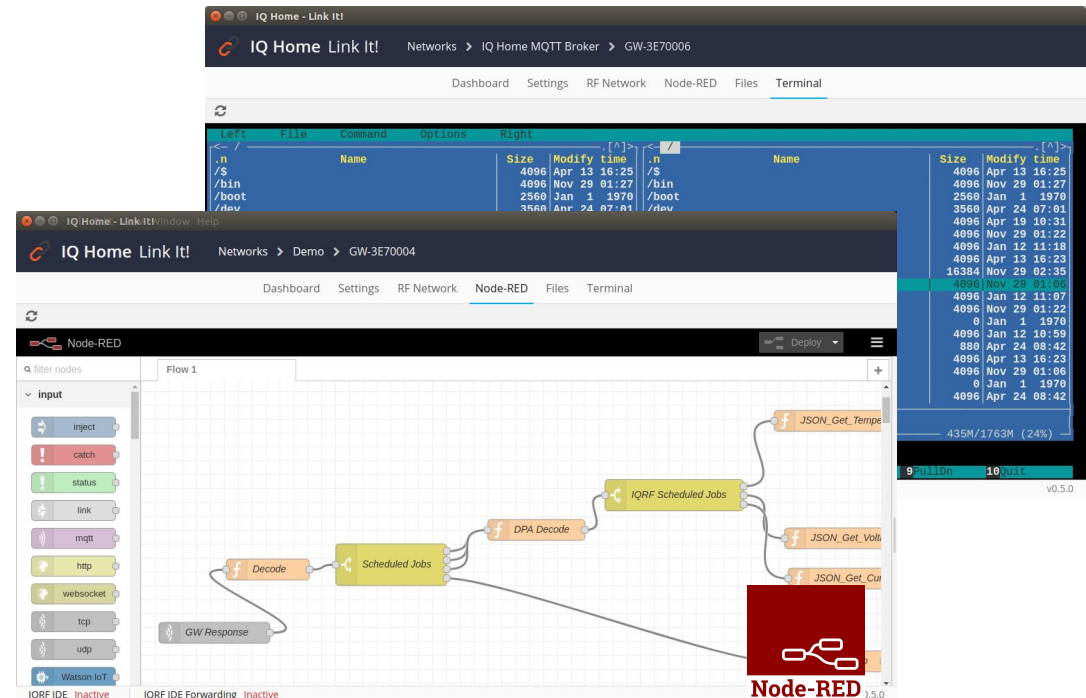
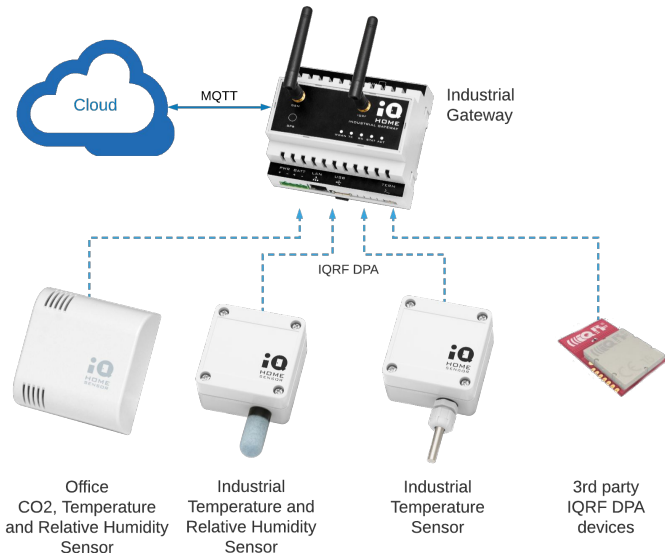


- **Industrial grade design**
 - DIN rail mountable enclosure
 - **Industrial temperature:**
 - -20 °C to +70 °C
 - **Native MQTT protocol support**
 - **Local decision support without active data connection**
-
- **Security**
 - All access keys are stored in special coded storage
 - If the gateway is stolen the MQTT keys are in safe

- **Link It! - Management and configuration tool**
 - Remote configuration
 - Remote IQRF network management
 - IQRF IDE over MQTT support



- Local user application support
- Remote Node-RED programming support with Link It!
 - Debug you field software from your heated office.

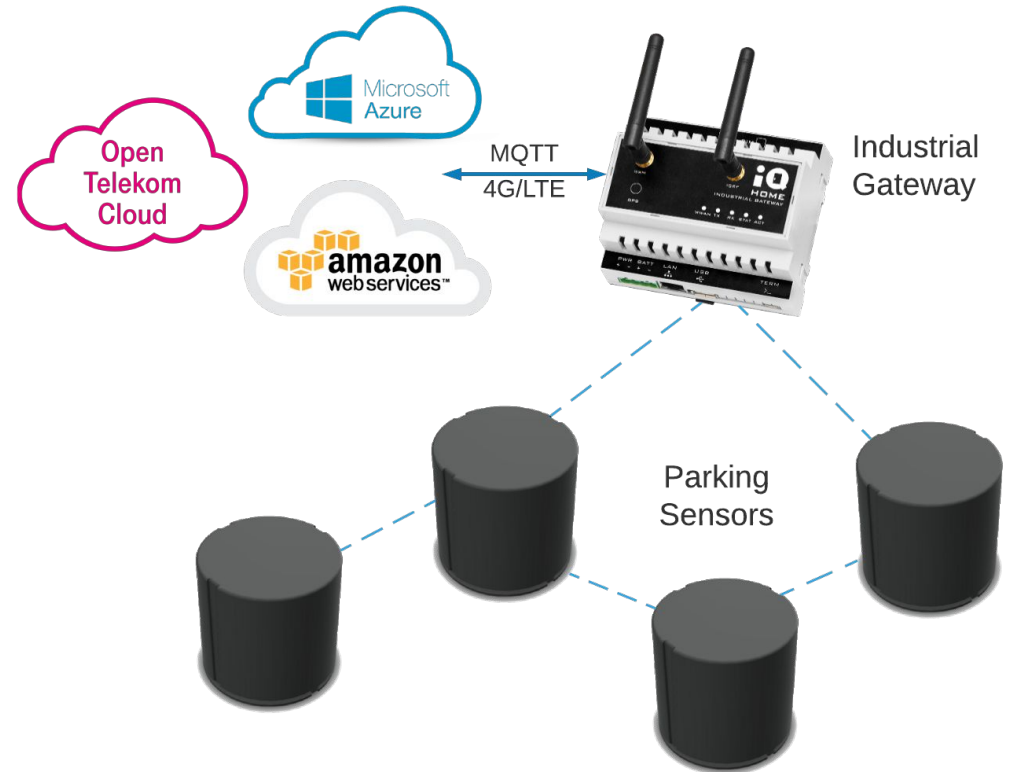
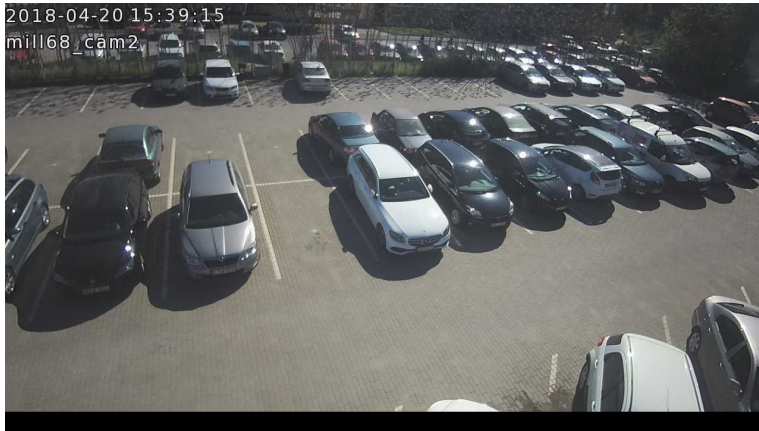


Use Case - Parking systems in Hungary

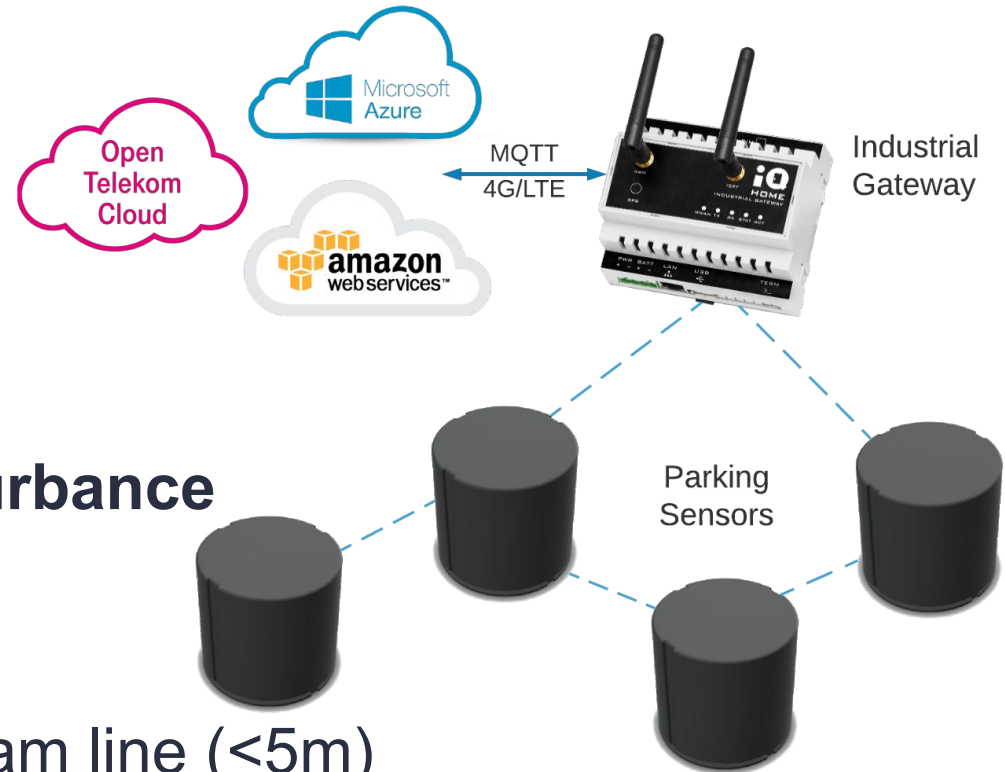
T - Systems -



make**sense**



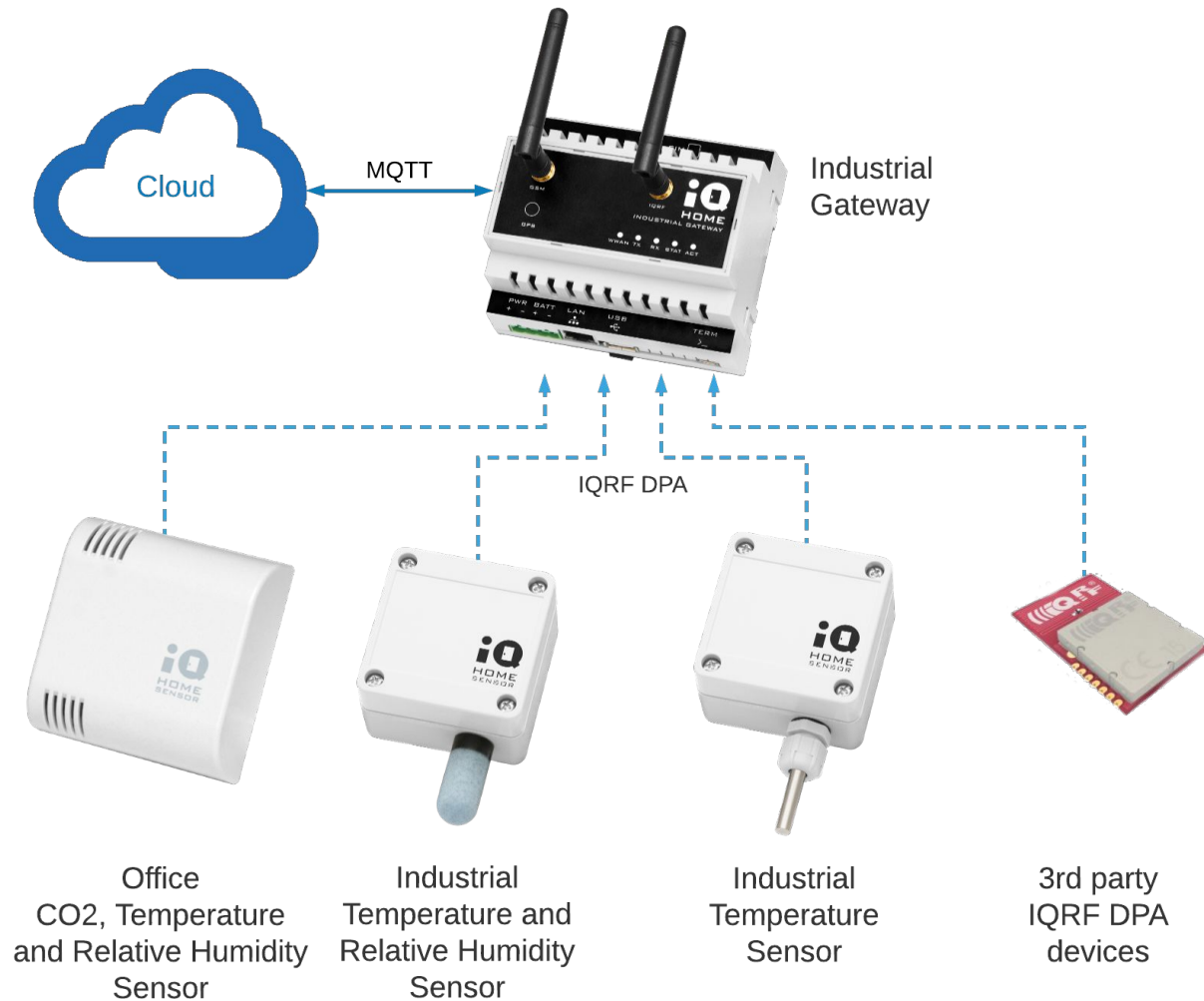
- **Budapest**
 - **Telekom parking area**
 - 50 sensors
 - 7/24 cam controlled environment
 - 24 month tests with 1440 Validated status/day



- **City of Debrecen**
 - **Extreme electric disturbance**
 - 200 sensor network in city center
 - 60pcs next to the tram line (<5m)
- **City of Kaposvár**
 - 400 sensor network

Use Case - Temperature monitoring

IQ Home Ecosystem - Application example



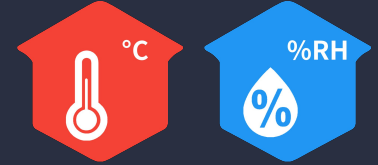


CO₂ Sensor



- Office, home or building usage
- Li-Ion battery wireless solution
- Various configurations:
 - Temperature
 - Relative Humidity
 - CO₂
- Wall mountable elegant design
- IQRF DPA compatible set
- -20 °C to +65 °C sensing temperature range





- Ready to use wireless industrial sensors
- Li-Ion battery wireless solution
- Various configurations:
 - Temperature
 - Relative Humidity
- Wall mountable design
- IQRF DPA compatible set
- -40 °C to +125 °C sensing temperature range



- IQRF Alliance members who has already adopt IQ Home sensors:



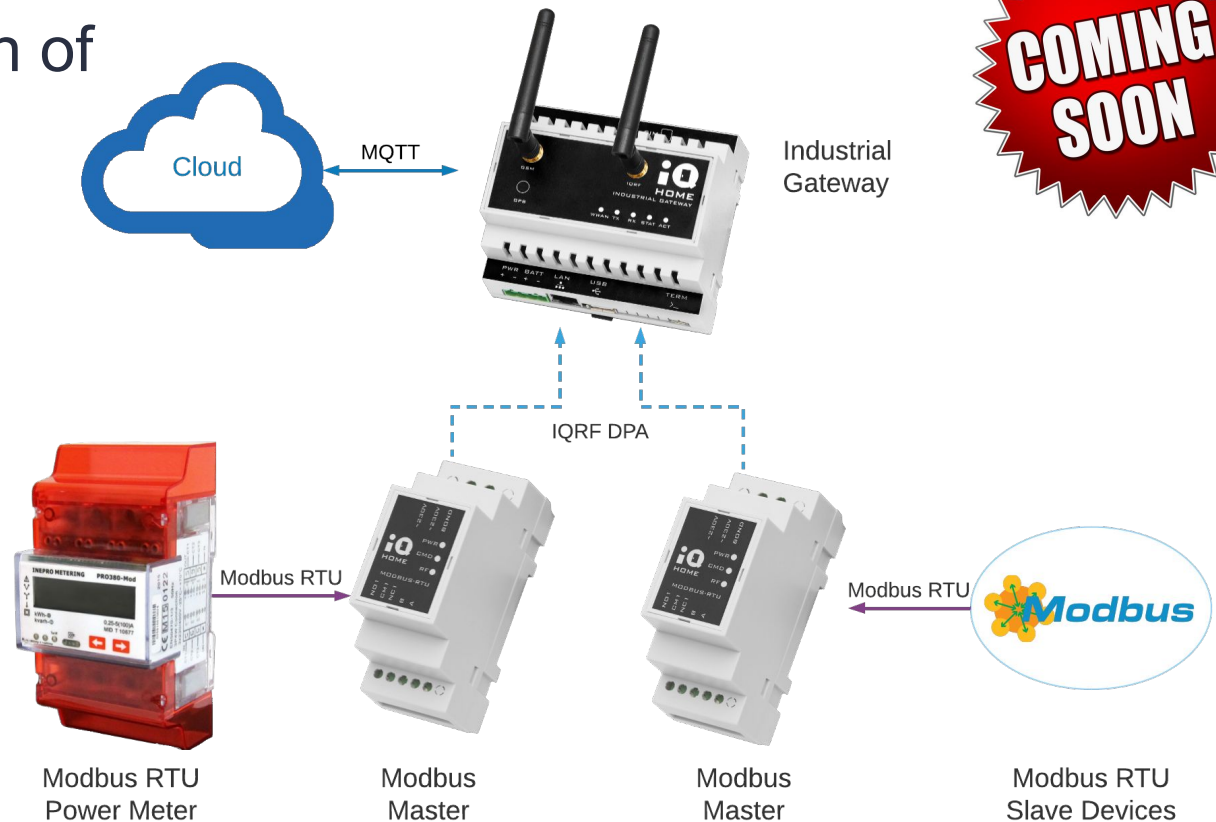
UiO



Óbuda
University

Use Case - Power consumption monitoring

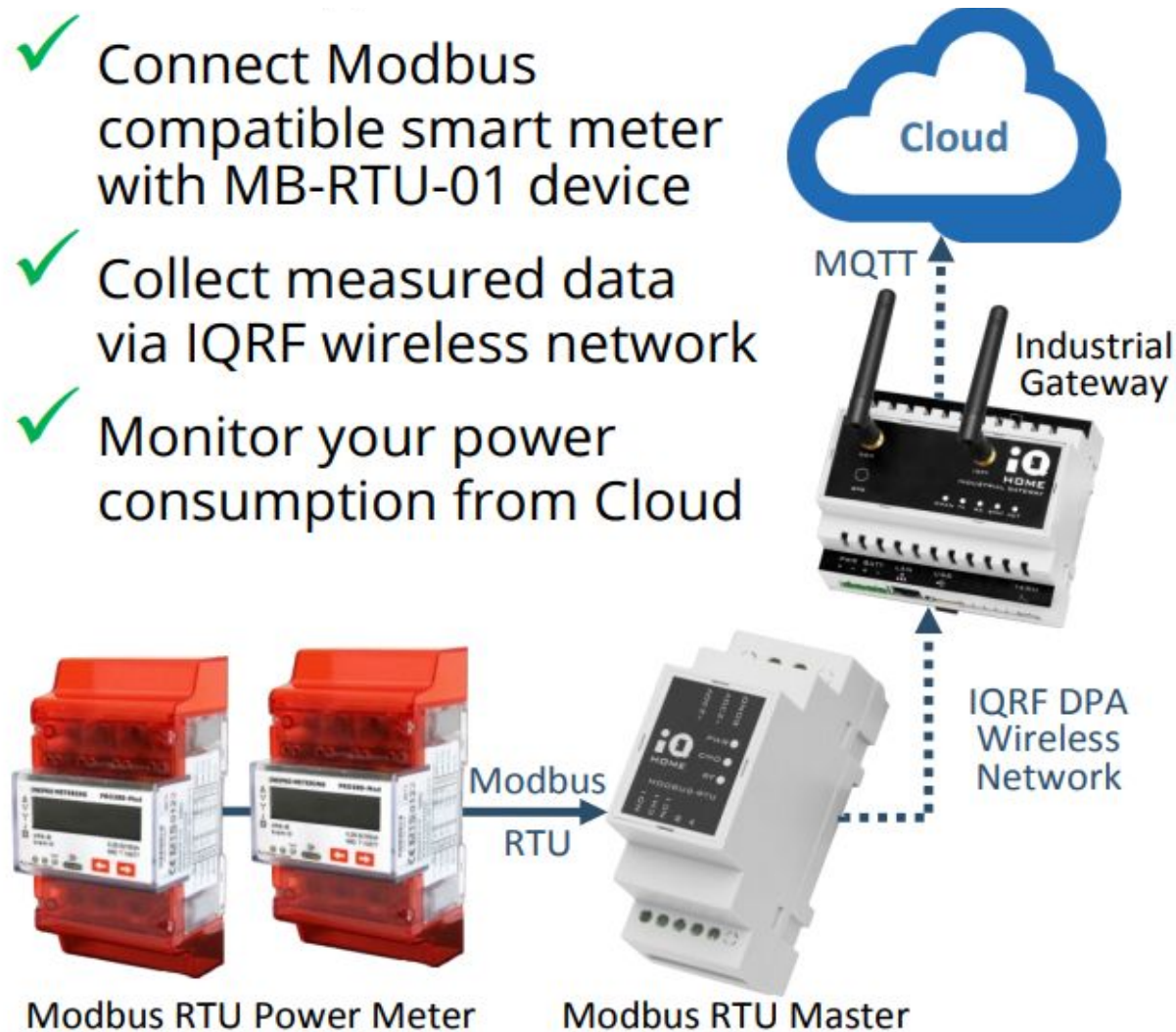
- Modbus communication without wires
- Easy integration of Modbus RTU device
- Centralized Modbus RTU control
- Centralized Modbus RTU data collection



COMING SOON

Power meter application Step-by-Step

- ✓ Connect Modbus compatible smart meter with MB-RTU-01 device
- ✓ Collect measured data via IQRF wireless network
- ✓ Monitor your power consumption from Cloud



Live Demo

Prize Draw

Thank you for your attention!

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