

IQ Home Ecosystem

**HOW TO USE AND MANAGE GATEWAYS, SENSORS AND ACTUATORS
IN ONE WIRELESS NETWORK OVER MQTT PROTOCOL**

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www.iqhome.org

■ Who we are:

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

■ What we do:

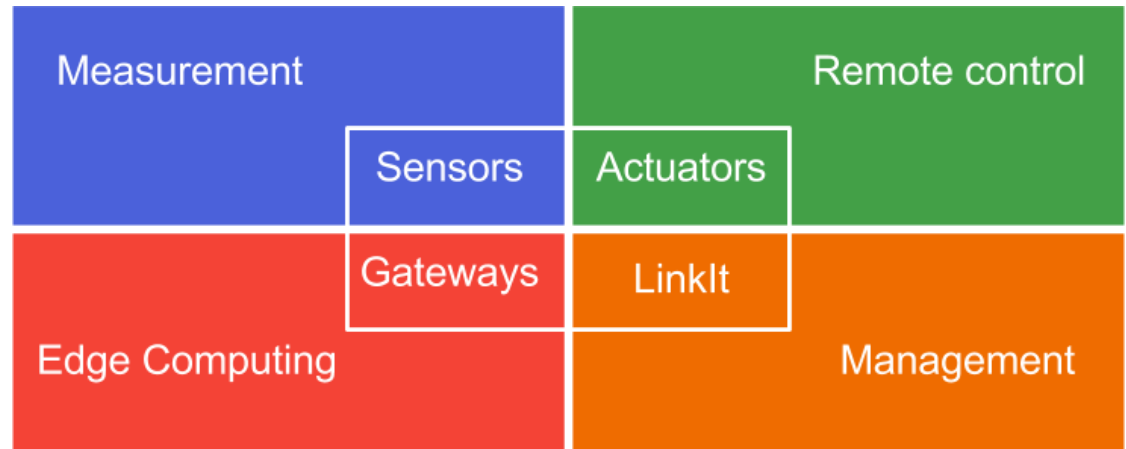
- Developing easy to use and customizable automation solutions based on wireless communication.



■ Family of ready to use IQRF-DPA compatible products

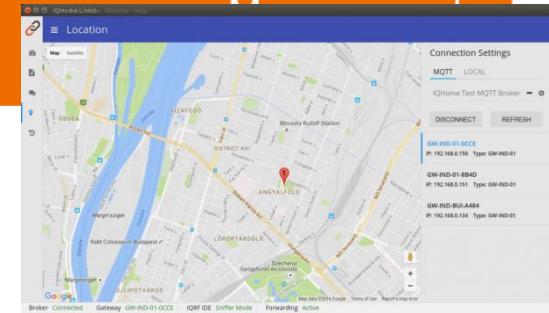
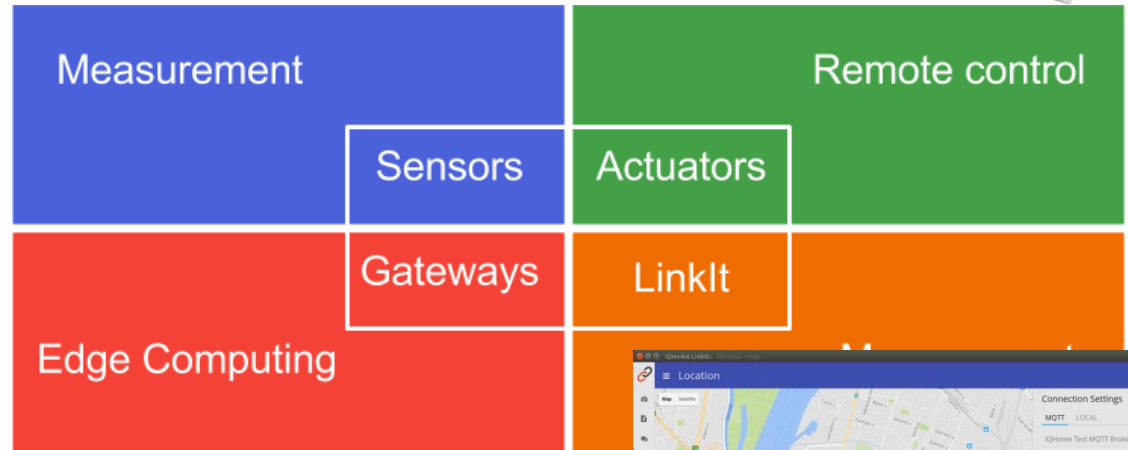
■ Main lines:

- Sensors
- Actuators
- Gateways
- Management

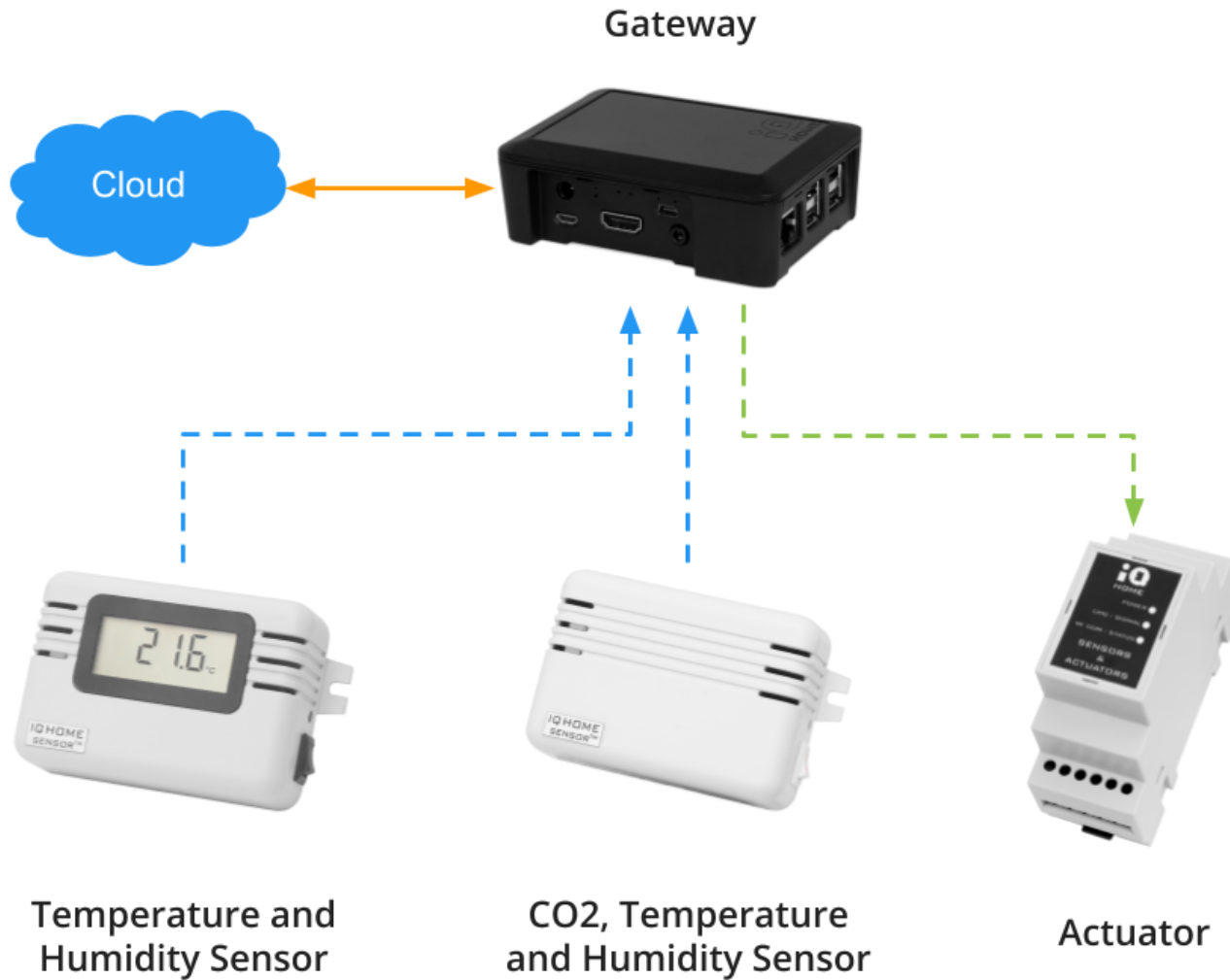


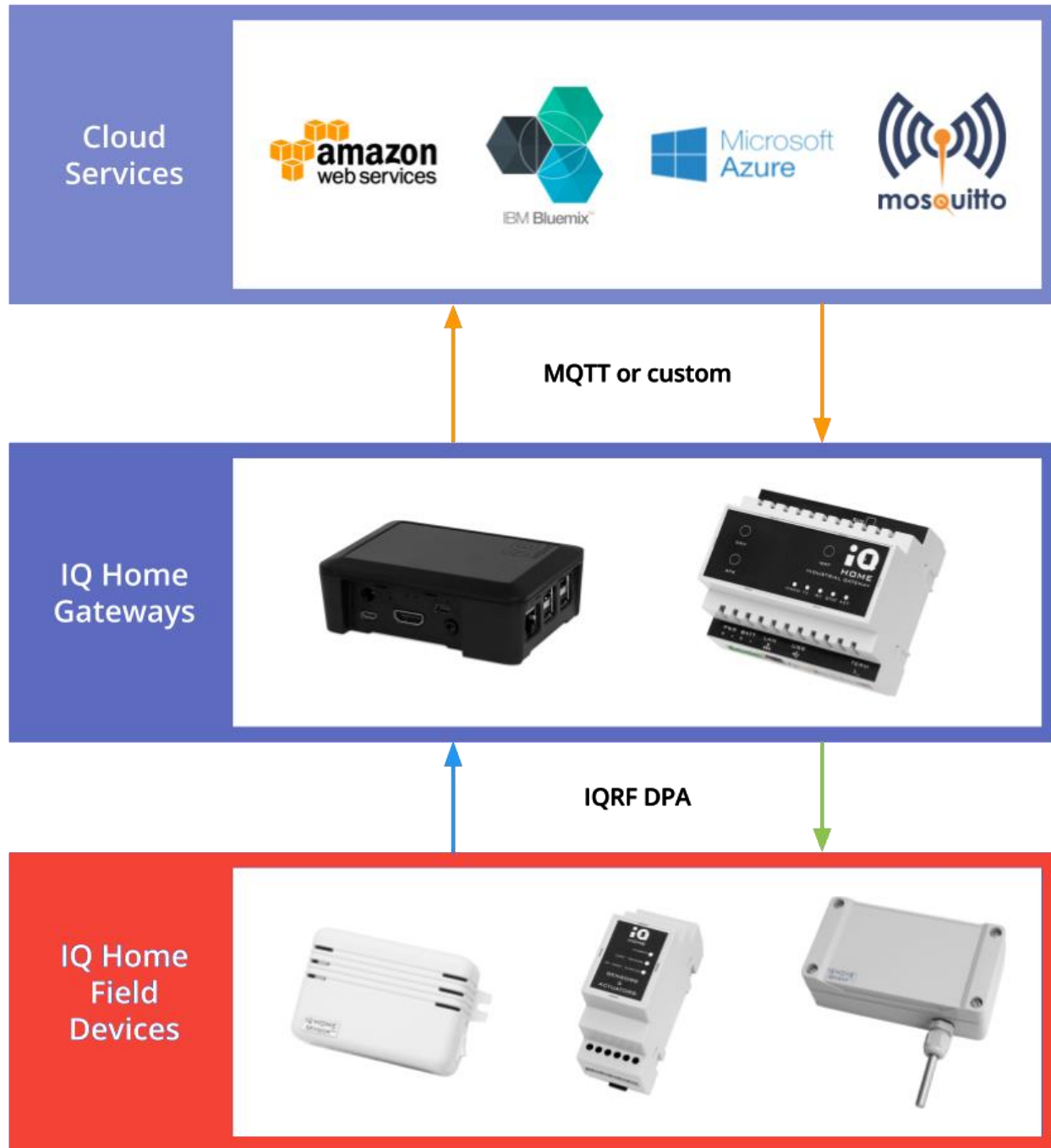


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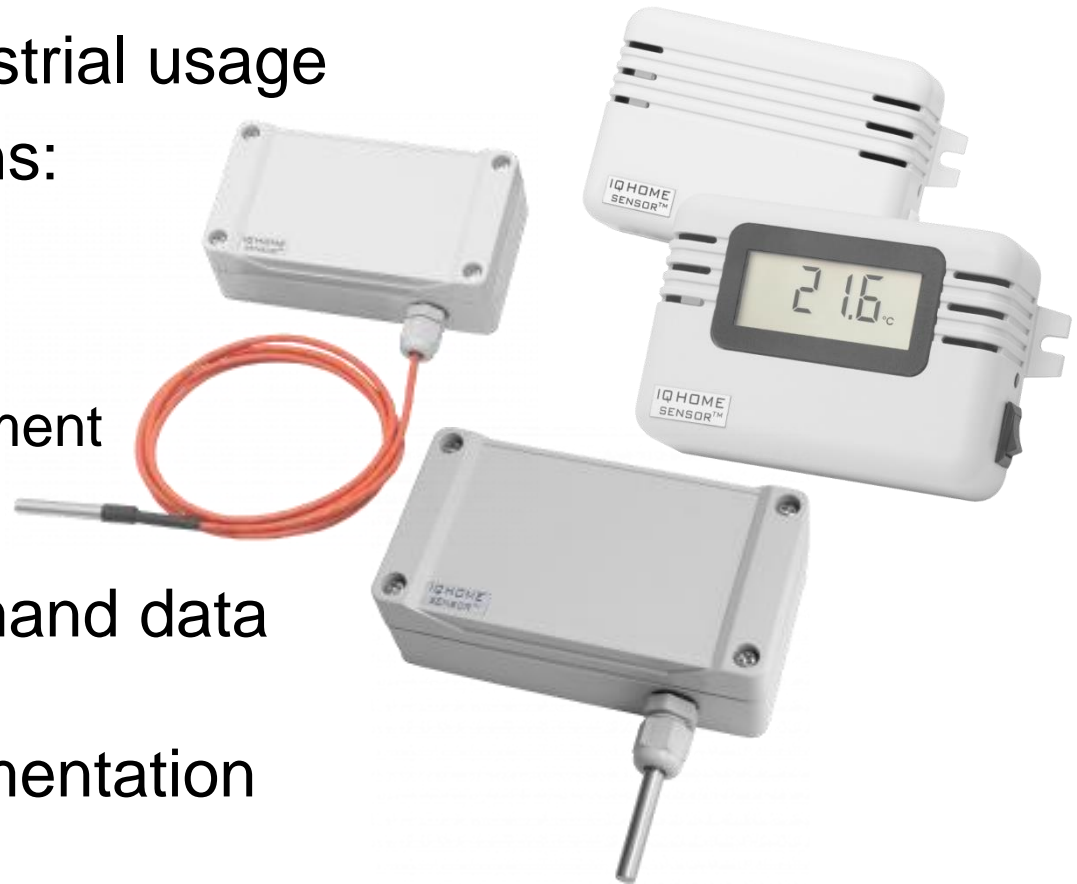
Application example



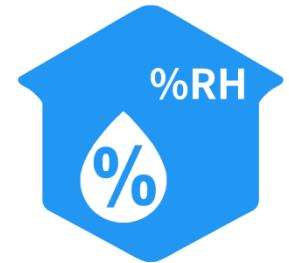
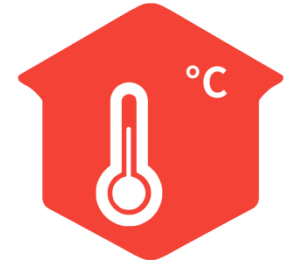


Sensor Family

- Ready to use ambient sensors
- Office, home or industrial usage
- Various configurations:
 - Temperature
 - Relative Humidity
 - CO2 level measurement
- Open command set
- Fast response command data collection possibility
- Precise sleep implementation
- Battery powered



- Office design:
 - IP30 case
- Industrial design:
 - IP65 case for industrial usage
- 0.0625 °C resolution
- 0.0625%rH resolution
- 5000 ppm CO₂ measuring range
- Operating temperature range
 - -40°C ... +85°C
 - -40°C ... +125°C (with external sensor)



- Matrix Control
 - Control up to 239 Relays with one RF Command
 - Based on Acknowledged FRC
- Typical application:
 - Industrial lighting
 - Outdoor lighting
 - Heating control

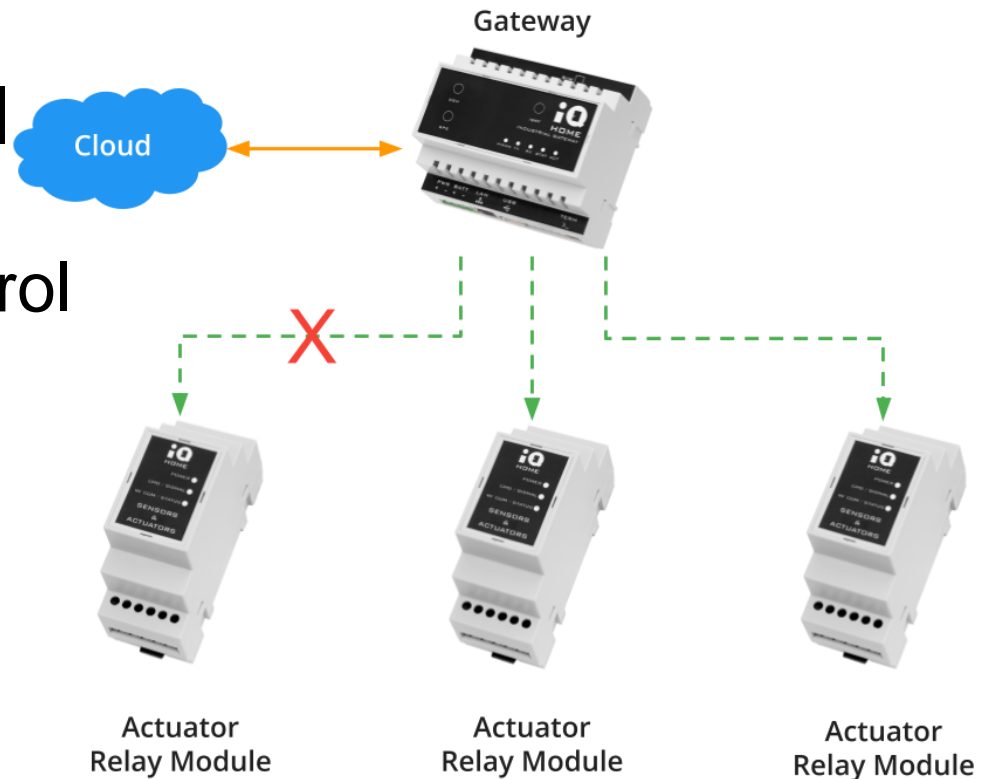


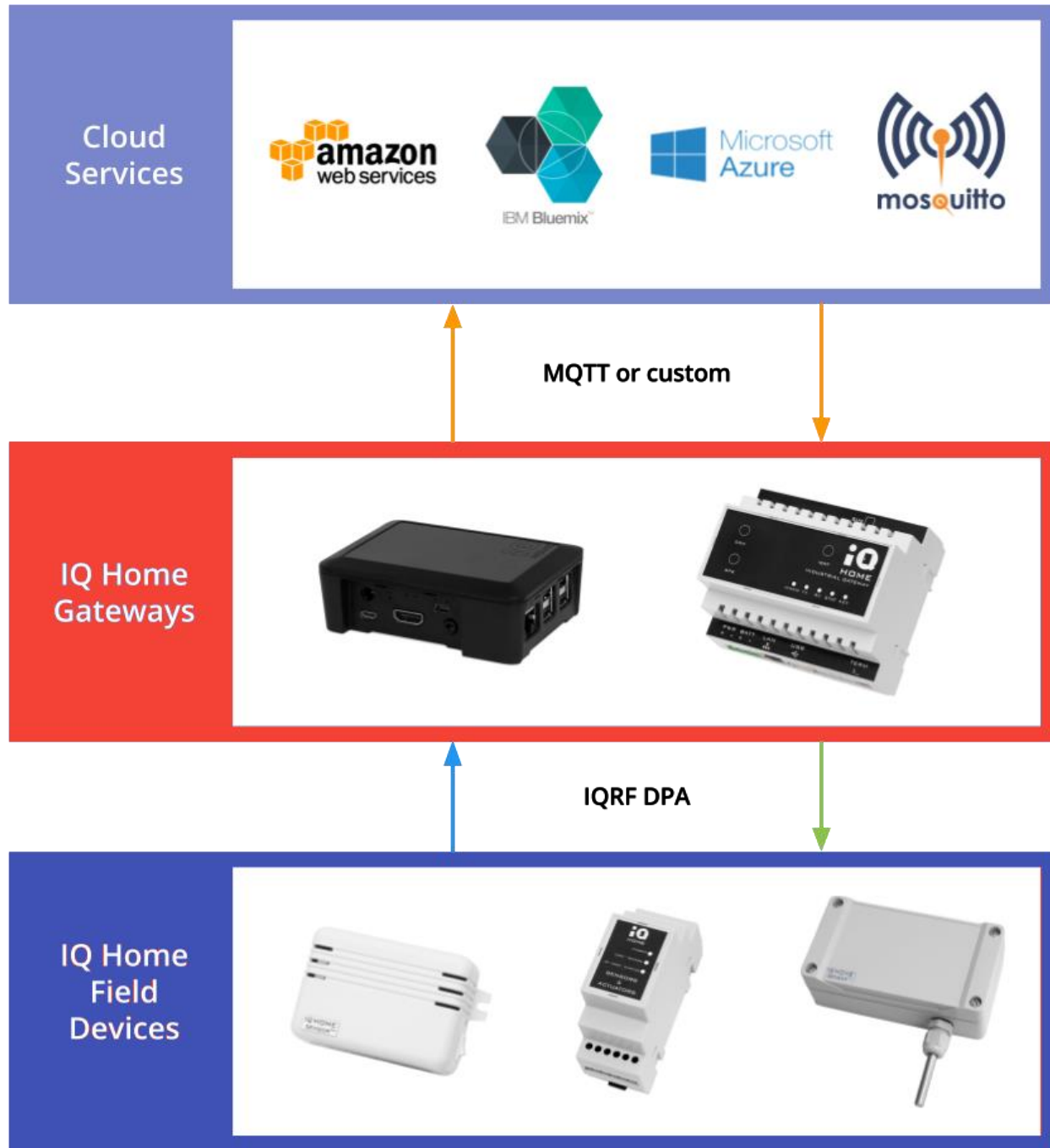
Matrix Control



Actuator Family

- Fail-Safe control and Boot-Up control
 - Timeout Control and Power On Control
 - To Prevent devices if the network connections broken
- Input voltage:
 - 230 VAC
- Two separate relay in on device
 - SPDT Relays up to 10 A on 230V

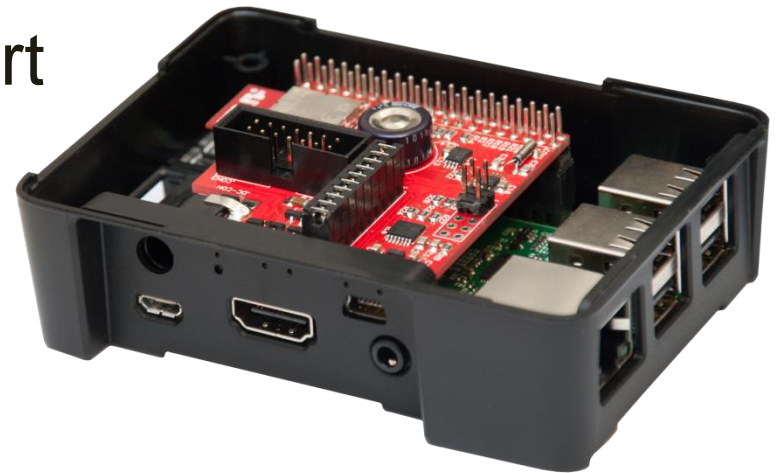




- Connects IQRF network to the Internet
- Easy to create IoT sensor networks
- Easy to integrate with IQRF-DPA based sensors and actuators
- Ready to use gateway
- Gateway with MQTT support
- Two sub-family:
 - Universal Gateway
 - Industrial Gateway



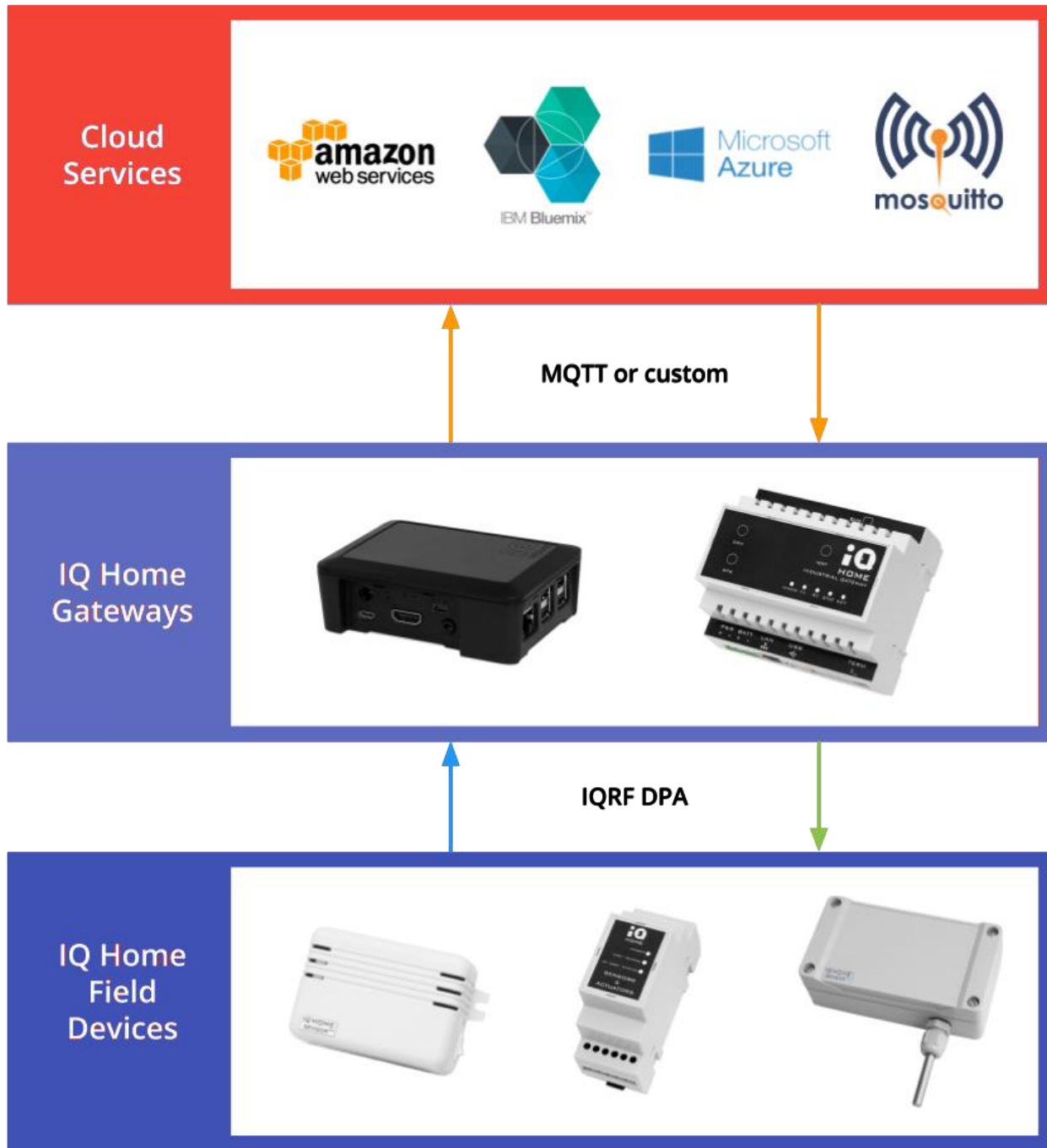
- Ready to use gateway
- Based on Raspberry Pi B+
- Custom extension board support
- RTC on board in case of power outage
- Protected EEPROM storage
- Gateway with MQTT support
- Desktop or wall mountable



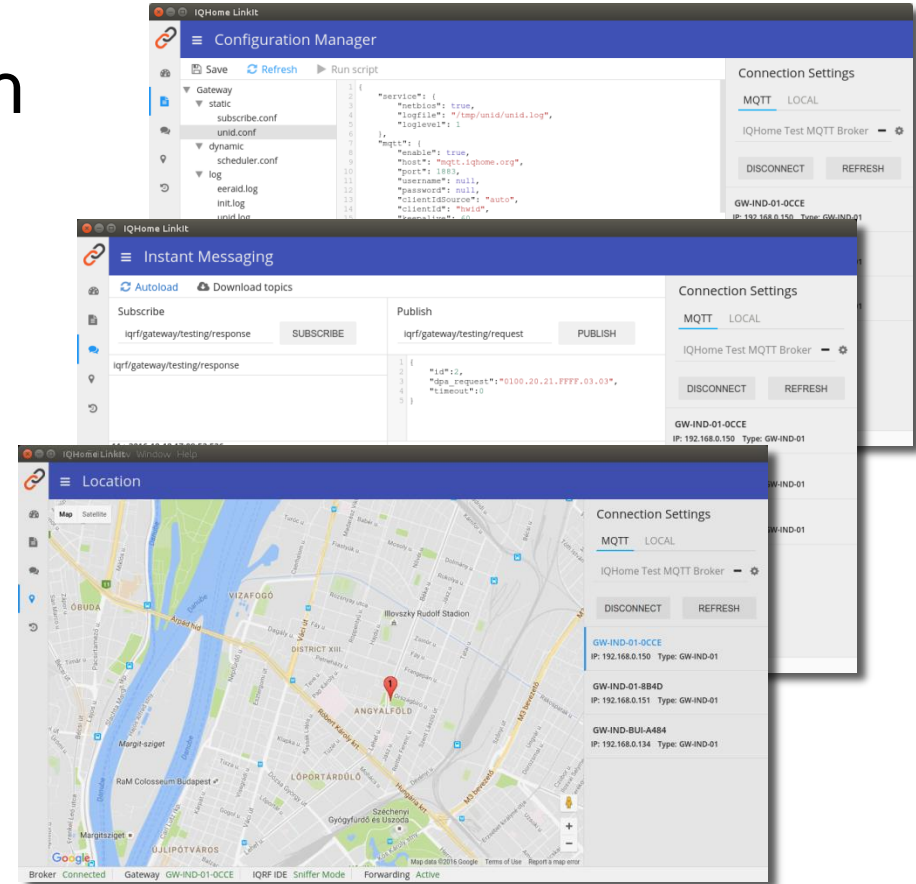
Industrial Gateway

- Ready to use gateway
- Operation temperature $-20\text{ }^{\circ}\text{C}$ $+70\text{ }^{\circ}\text{C}$
- eMMC RAID & EEPROM RAID
- Enhanced reliability features
- 4G/LTE connection
- GPS localization
- RTC on board in case of power outage
- Supply voltage and device temperature monitoring
- Power over Ethernet
- 12V Acid-lead battery backup support
- Custom extension board support
- Gateway with MQTT support
- DIN Rail mountable



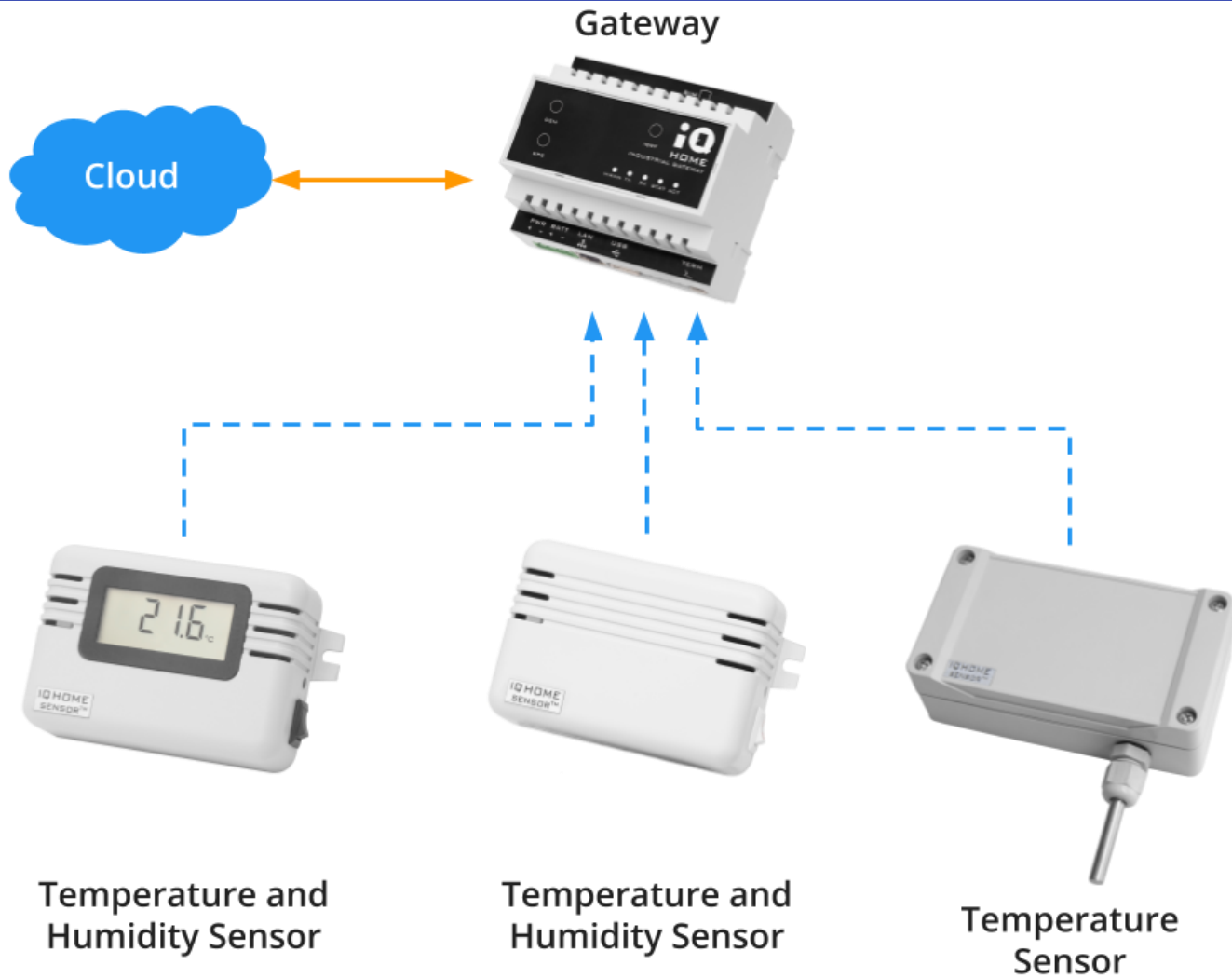


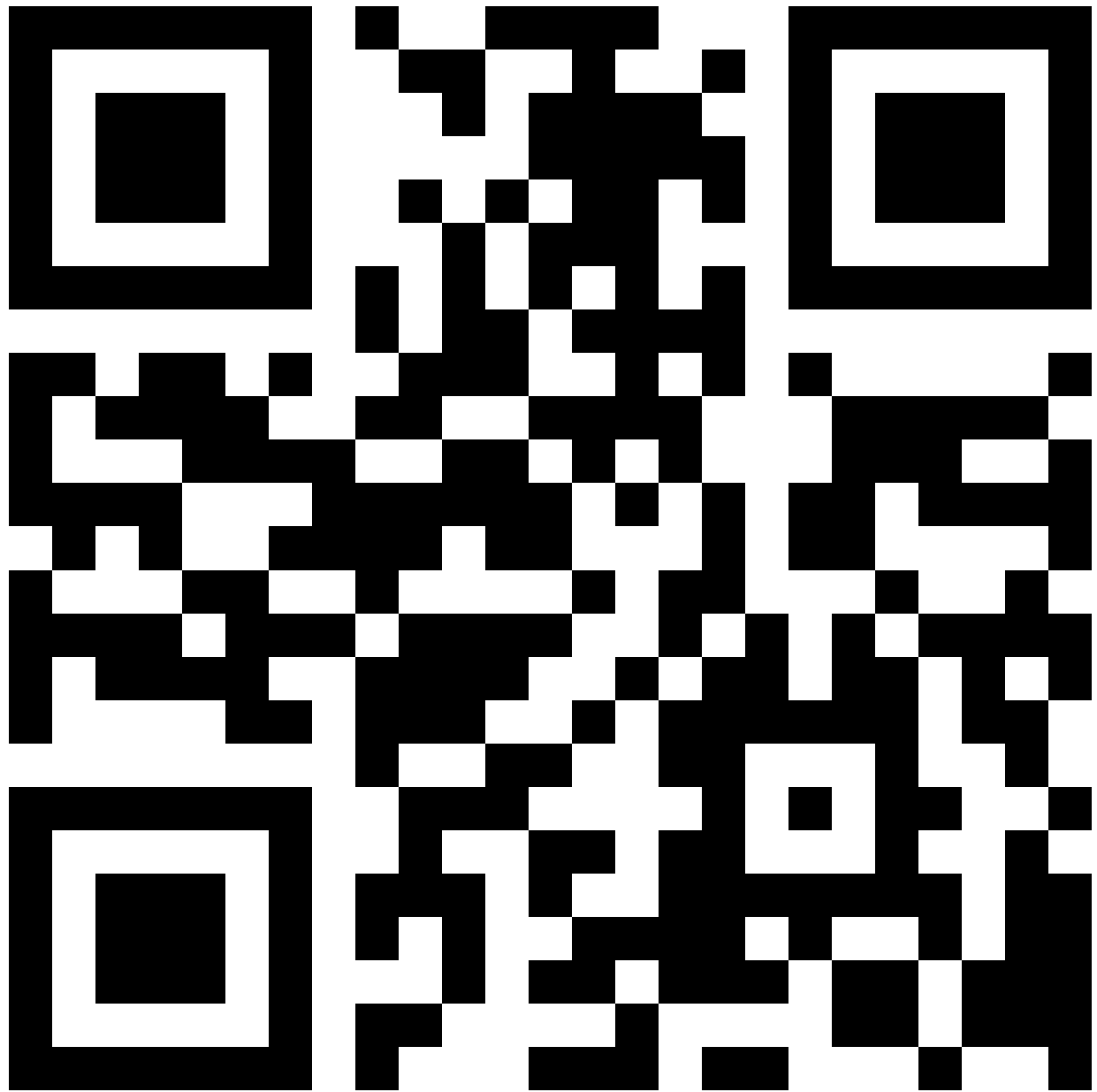
- Remote connection with
- IQ HOME - Link It!™
- Monitor your gateway over MQTT protocol
- Configure your gateway over MQTT protocol
- Run Scripts remotely
- Connect IQRF IDE to Universal or Industrial Gateway over MQTT



Live application example

Temperature monitoring

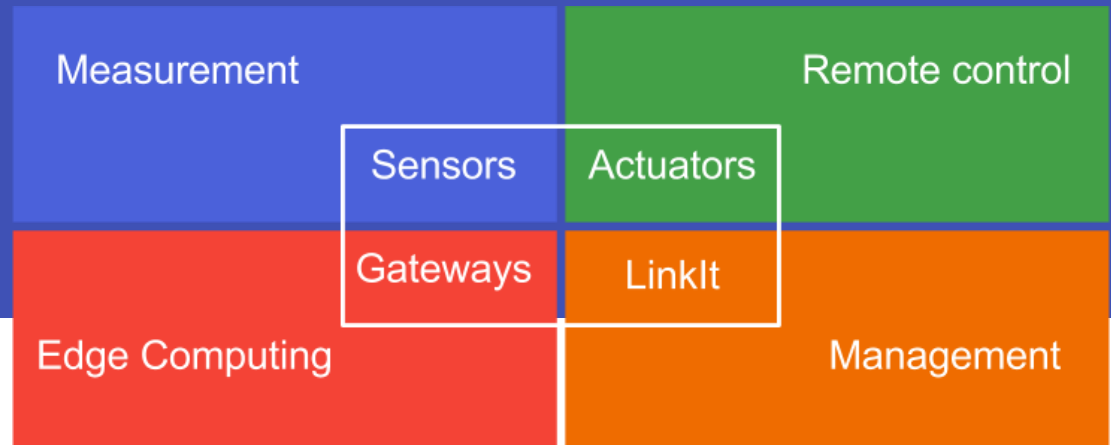




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Thank you for your attention!

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