EquipmentTracker

Getting started Guide, V1.0

7th of Sep 2023

Phase 1 Check technical functionality
Phase 2 Install measuring coils
Phase 3 Connect switch wires
Phase 4 Modify parameters if needed
Phase 5 Ensure data transfer
Phase 6 Fill in the equipment information

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Phase 1 Check technical functionality

Step 1.1. Open an account to SmartKitchen service.

Step 1.2. Activate “Maintenance” license to your account
- Select “Settings” and “License management”

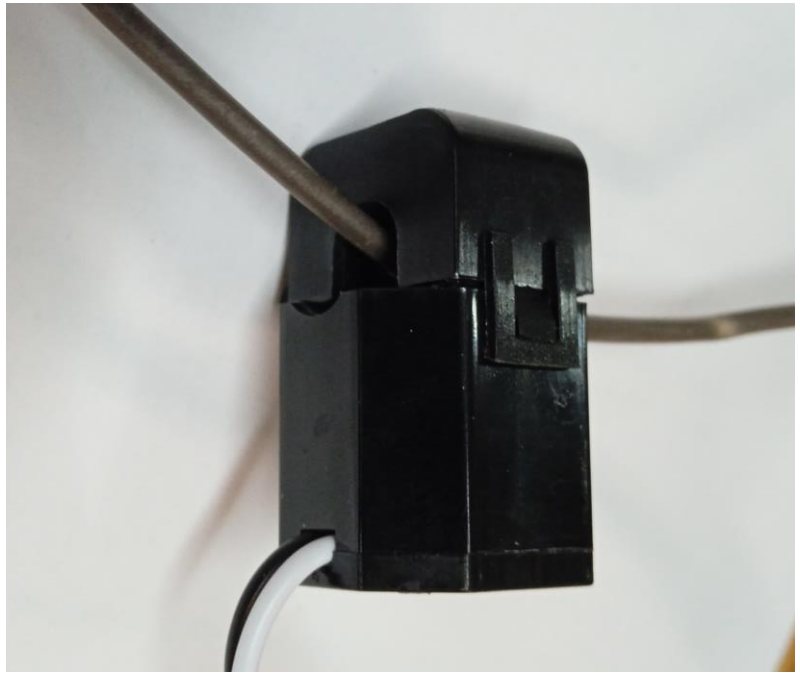
Step 1.3. Activate the EquipmentTracker measuring devices to your account.
- Select “Settings” → “Measurement devices” → “Add new device”
- Give as nick name to the device

Step 1.4. Activate Mobile gateway devices to your account
- Select “Settings” → “Gateway devices”

Step 1.5. Check that devices are working
- Switch power on to all devices
- Select “Monitoring”
- Within few minutes you should see that devices are online

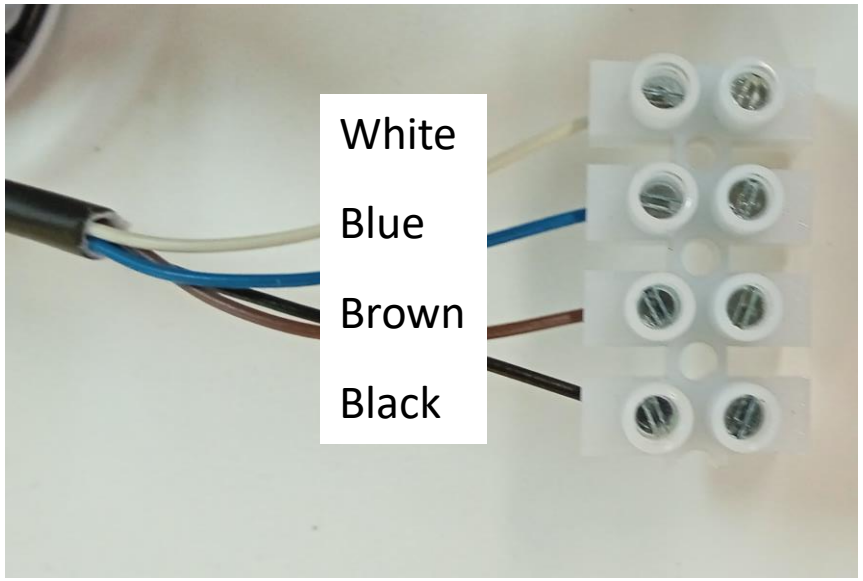
Phase 2 Install measuring coils

Step 2.1.
Clip split coil around the power cable



Step 2.2.
Close coils which are not used
- Some “ghost” measurements may appear if the coil is left open

Phase 3 Connect switch wires



Switch 1

Switch 2

Switch 3

Ground

Polarity:

Status 1: switch wire is open or connected to positive voltage (+3VDC….+24VDC)

Status 0: switch wire is connected to ground

Recommendation: write on paper notes so that you will remember connections

Phase 4 Modify parameters if needed

Use SmartKitchen Toolbox Android app. There is a separate user guide of the SK Toolbox.

There are four parameters to be modified

1. “Repeated” parameter
- As default this is zero; this means that the signal (Bluetooth and Lora) will not be repeated by SmartKitchen repeater device and the signal range is limited specifically if the device is inside of a kitchen equipment
- If the parameter is set “1” the signal will be repeated; SmartKitchen repeater will convert Bluetooth signal to LoRa signal and the range will be much wider

2. “Lora Interval” parameter
- As default this is zero for three-phase device and 3 minutes for the single-phase device
- When the parameter is zero, there will be no LoRa signal sent which extends the battery lifetime significantly
- It is recommended to use 3min interval

3. “Power on” parameter
- When measured current is above this value, it is assumed that the equipment is in operation and running hours will accumulate
- See the specification to see the default value

4. “Power off” parameter
- When measured current is above this value but lower than Power on it is assumed that the equipment is in stand-by mode and stand-by hours will accumulate
- See the specification to see the default value

Phase 5 Ensure data transfer

Switch power on to mobile gateways(s) and plug the USB recharger to electricity socket.
Plug repeaters to the electricity socket.
There are four paths for the radio signals

Path1 Bluetooth from measuring device to gateway
The gateway shall be close enough (about 7m) to the equipment.

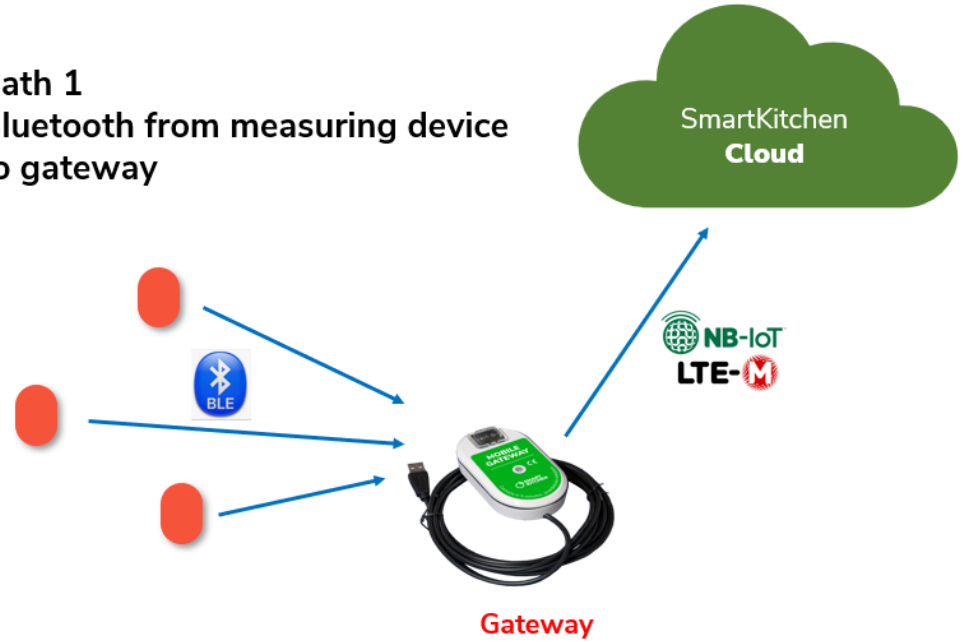
Path2 Bluetooth from measuring device to repeater, Lora from repeater to gateway
Gateway can be far away (about 70m) from the equipment.
Repeating shall be activated in the Measuring device.

Path 3 Lora from measuring device to gateway
Gateway can be far away (about 50m) from the equipment.
Lora shall be activated in the measuring equipment.
Battery lifetime will be shorter.

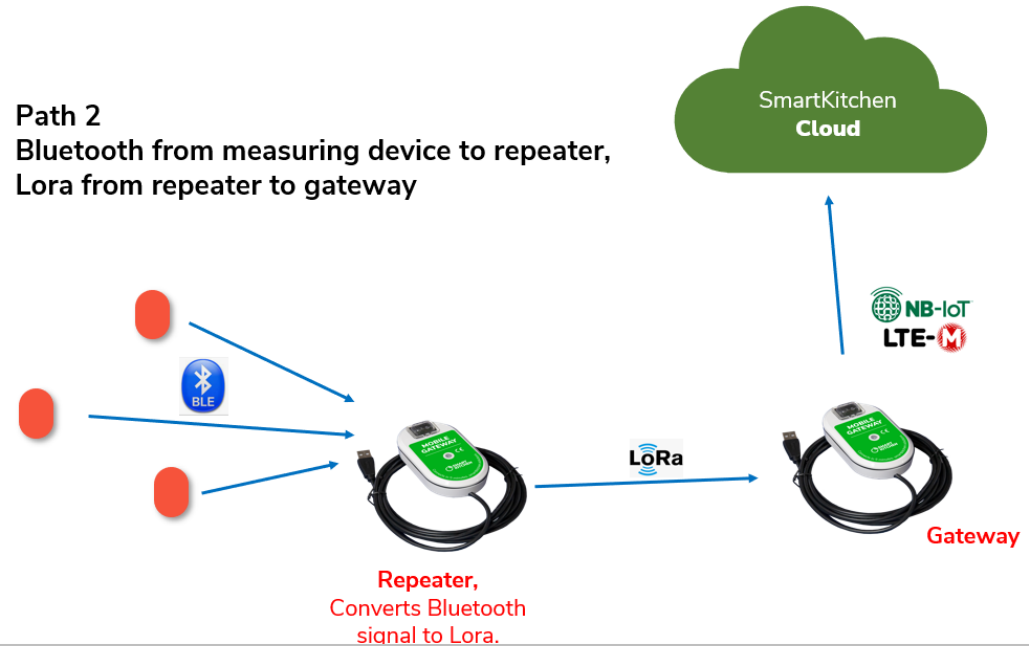
Path4 LoRa from measuring device to repeater, Lora from repeater to gateway
Repeater can be far away (about 50m) from the equipment and gateway can be far away (about 70m) from repeater.

The signal paths are illustrated on the next slide.

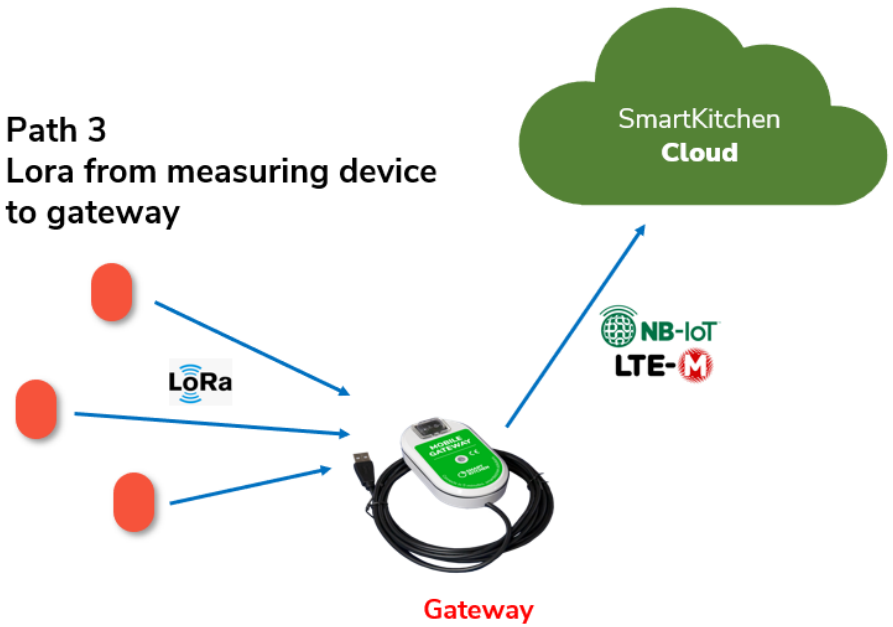
Path 1
Bluetooth from measuring device to gateway



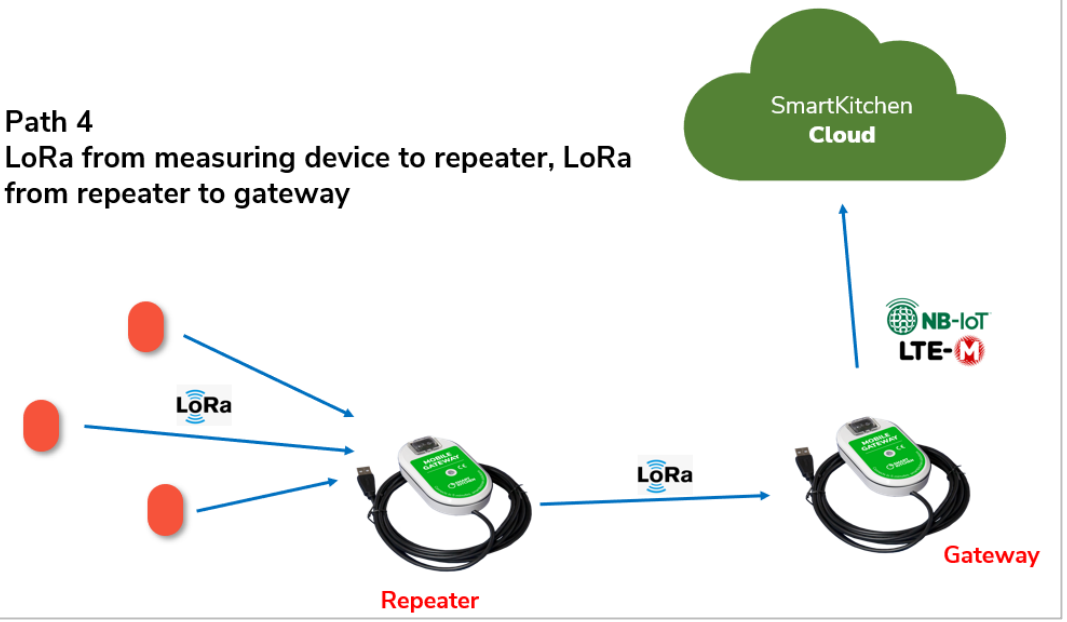
Path 2
Bluetooth from measuring device to repeater, Lora from repeater to gateway



Path 3
Lora from measuring device to gateway



Path 4
LoRa from measuring device to repeater, LoRa from repeater to gateway



Phase 6 Fill in the equipment information

Step 5.1. Give a nick name to the equipment (this you may have done already in phase 1)

- Select “Settings” → “Measurement devices” → “Add new device”
- Give as nick name to the device
- Add the model and serial number of the kitchen equipment

Nickname	Dishwasher II
Color	Orange

Information of the device being monitored

Device model	Metos WD-6
Device serial number	154673965

Step 5.2. Fill the equipment information

- Select the equipment in the monitoring dashboard
- Select “Maintenace” → you will see the maintenance log
- Select “Settings”
- Add the equipment information
  - Model of the equipment
  - Serial number of the equipment (optional)
  - Maintenance intervals in hours (A, B and C)
  - Labels of the switch positions

Model	Metos WD-6
Serial number	154673965
Service A interval	500 h
Service B interval	100 h
Service C interval	Not set
Operating voltage	
Power On limit	6000mA
Power Off limit	1000mA
Switches	
Switch 1 On	Malfunction
Switch 1 Off	No malfunction
Switch 2 On	Conveyor running
Switch 2 Off	Conveyor stop
Switch 3 On	
Switch 3 Off	

Edit information

SMART KITCHEN

Ready

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