

## Quick Start Guide

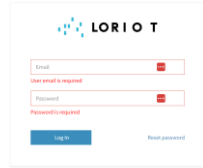
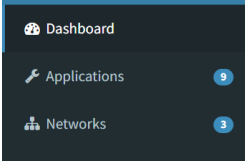
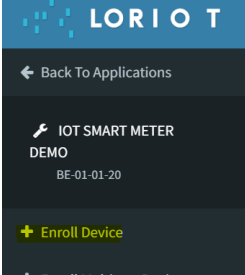
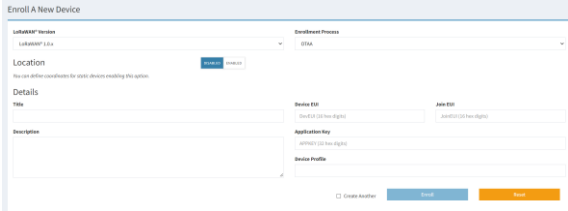
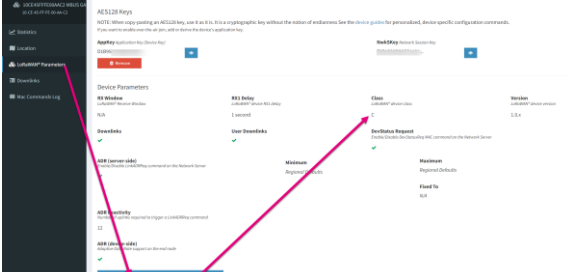
Loriot integration + parametrization

V1.1 / FW: 0.2.2

# Tesenso M-Bus



# Enroll device in Lorient

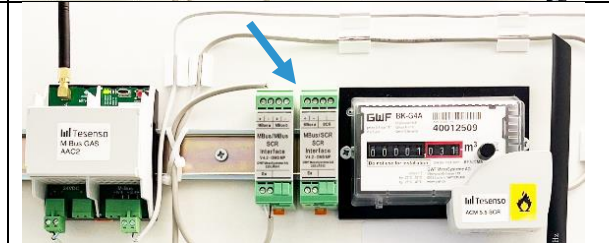
<p>Log into Lorient (LNS)</p> <p><a href="https://tesenso.lorient.io/">https://tesenso.lorient.io/</a> or your own LNS Server.</p>	
<p>Go to «Applications»</p>	
<p>Go to the application, in which you want to enroll the device</p>	<p>BE010120 IoT smart Meter Demo</p>
<p>Klick left on «Enroll Device»</p>	
<p>Enter the individual data:</p> <ul style="list-style-type: none"> <li>- Data which must always be filled in: <ul style="list-style-type: none"> <li>o Title: That's how the device will be shown in «Application» <ul style="list-style-type: none"> <li>▪ It's recommended to write the name of the device + the last 4 digits of the Device EUI</li> </ul> </li> <li>o Device EUI: Always 16 digits</li> <li>o Join EUI: Always 16 digits</li> <li>o Application Key: Always 32 digits</li> </ul> </li> </ul> <p>If you enter everything correctly, click on "Enroll".</p>	
<p>Important: Go to "LoRaWAN Parameters", and set the Class to C.</p>	

## Connecting M-Bus to the meter

At first, install the M-Bus near the meter (so it's in range for the cable)



Connect the meter with the M-Bus (if it's a SCR, a SCR Interface must be used)



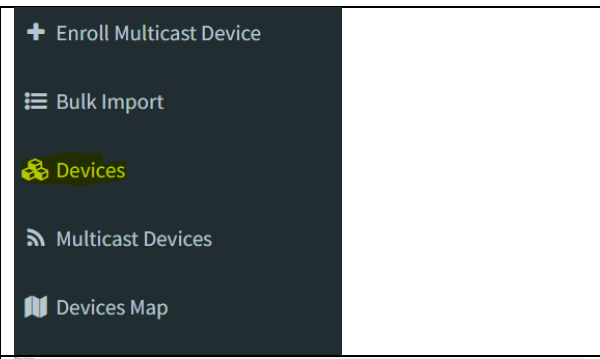
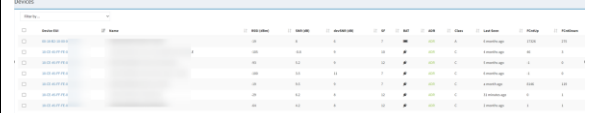
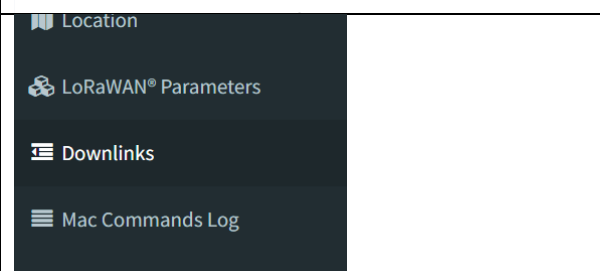
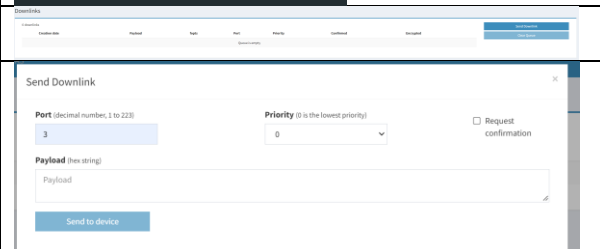
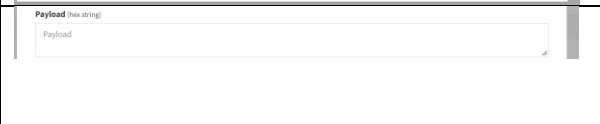
Now connect the device to the power supply.

LED 1 = Power

LED 2 = Connected successfully with the LoRaWAN Server



# Making the device functional via downlinks

Go to «Application» and click on "Devices"	
Click on the device (You can search for it in the search bar)	
Click left on «Downlinks»	
Click right on «Send Downlinks»	
«Port» is always on 3 and "Priority" always on 0.	
Now we talk about «Code" or "Payload". We mean with that the digits, which are entered in the "Payload".	
To make the device functional, there must be sent at least one setting via Downlink: <ul style="list-style-type: none"> <li>- Secondary adress</li> <li>- Send interval (optional)</li> </ul>	

### To set Secondary Address

- The Code/Payload is made out of two parts;
  - o 05 → Length
  - o 85 → MsgType
  - o Meter number → secondary Address of the meter
  - o Together it's this payload:  
0585"meter number"
    - The meter number can be read on the meter
- Now the payload in this example will be:  
**058540012509**
- Note: If the meter number is only 7 digits, a 0 must be entered beforehand.



#### Send Downlink

Port (decimal number, 1 to 223):  Priority (0 is the lowest priority):  ☐ Request confirmation

Payload (hex string):

### Optional: Set send interval

- Now you set the sending interval (we recommend 30min)
- Here are the payloads for the different send intervals;
  - o 058000000001E → 30min
  - o 058000000000F → 15min
  - o 0580000000005 → 5min

#### Send Downlink

Port (decimal number, 1 to 223):  Priority (0 is the lowest priority):  ☐ Request confirmation

Payload (hex string):

To send the Payload, click on "Send to device" for every different Downlink

### Deleting settings

- If there has been sent a wrong downlink or there already exist e setting, which has to be deleted, you can do a reset with this payload;
  - o **0183** → Delete saved slaves from EEPROM

#### Send Downlink

Port (decimal number, 1 to 223):  Priority (0 is the lowest priority):  ☐ Request confirmation

Payload (hex string):

### Checking

- If everything is sent correctly, there should be an uplink on the Device menu, which looks like this:

Last Uplink RF Parameters			
Last Seen	Oct 19, 2022, 4:06:58 PM		
RSSI	-31.00 dBm		
SNR	7.20 dB		
Frequency	N/A		
SP	32		
Bandwidth	125 kHz		
Gateway	9C2D9FFF40DFF		

Last data (10 latest records)*			
*Data can be received from any gateway on the server with community access enabled. This may not correspond with the time your gateway received data			
FCctip	Time	Port	Data
1	2022-10-19 16:06:58	3	058000000001E

## Contact us

We are happy to answer  
your questions!

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