SLHA00011 Manual

MySensors nRF24 Linky Module

1. Overview

This module plugs into French Linky electricity meters toread real-time information provided through the officialconsumer-side Télé-Information Client (TIC) output.That information, refreshed approximately every 10 sec-onds includes:

- Power (in W)
- Current (in A) for each phase
- Voltage (in V) for each phase (when available)
- Accumulated consumption (in Wh)



2. Key features

- Designed for MySensors with a nRF24 radio
- Self powered, doesn't require a battery
- Opensource firmware
- Follows Enedis-NOI-CPT_54E specification
- Auto detects baud rate and mode (1200 bps for historic, 9600 bps for standard)

3. Applications

• Home automation

4. Setup instructions

Disclaimer: If you do follow the instructions below and if your electrical setup is compliant, the setup procedure is safe. However, if you have any doubt or question don't hesitate to reach out to us or a local professional. It is always best to be sure.

Before reading further, please refer to the official instructions from Enedis released in "SéQuélec Fiche n°17" available for download at https://www.enedis.fr/media/3005/download.

4.1. For single phase meters



Step 1: Remove the unsealed green cover from your Linky electricity meter. For single phase meters, that is the entire cover (number 5 in the illustration above).

Step 2: Locate the connector (number 7 on the illustration above) into which the module should be inserted. It has three contacts (labeled A, I2 and I1) and a mechanical push button to open the contacts.

Step 3: While pushing on the mechanical button, insert the module all the way into the connector. Release the button to secure the module into the connector.

Step 4: Look at the visual indicators on the module. First, the "Liaison sans-fil" should start to blink green to indicate it is exchanging data with your MySensors nRF24 gateway. Only then, the "Liaison Linky" should start to blink green to indicate it is regularly receiving data from the Linky meter. If you experience anything different, please refer to the troubleshooting section of this manual.

Step 5: Place back the green cover removed at step 1. And you are done!

4.2. For three phase meters



Step 1: Remove the unsealed green cover of your Linky electricity meter. For three phase meters, that is the top cover (number 5 on the illustration above).

Step 2: Locate the connector (number 9 on the illustration above) into which the module should be inserted. It has three contacts (labeled A, I2 and I1) and a mechanical push button to open the contacts.

Step 3: While pushing on the mechanical button, insert the module all the way into the connector. Release the button to secure the module into the connector.

Step 4: Look at the visual indicators on the module. First, the "Liaison sans-fil" should start to blink green to indicate it is exchanging data with your MySensors nRF24 gateway. Only then, the "Liaison Linky" should start to blink green to indicate it is regularly receiving data from the Linky meter. If you experience anything different, please refer to the troubleshooting section of this manual.

Step 5: Place back the green cover removed at step 1. And you are done!

5. Troubleshooting

Something doesn't work? We have listed below a few possible symptoms and solutions. If the issue you encounter is not covered in it or if the possible solutions didn't work, please let us know, so that we can help you, and so that we can improve this manual. You will find contact information at the end.

Symptom	Possible explanation	Possible solution or further investigative action
None of the indicators light up.	TIC connector of Linky meter is not outputting any power.	If you are comfortable with a multimeter, you can verify that voltage is coming from the TIC terminals as expected.
	No power is getting into from the Linky meter to the device.	Make sure the device is plugged in all the way into the TIC connector of the Linky meter.
	Power is getting into the device, but internal power circuitry is not functional.	If you are comfortable with a multimeter, using the attached schematic, you can verify that the +3.3V voltage rail also has the expected voltage.
	The firmware is not running.	Connect the module to a computer using a USB ca- ble, open a serial port with 115200 8N1 settings and ensure logs are being output.
The "Liaison sans-fil" indi-	It likely means that the firmware cannot successfully send data packet to the MySensors gateway.	
cator blinks	This could be because they are too far apart or because they use different communication settings (data	
red.	rate, channel, or encryption for example).	
	To make investigating easier, the firmware outputs log messages which might give you a better idea of what is happening. Connect the module to a computer using a USB cable, open a serial port with 115200 8N1 config, and copy-paste the messages into the MySensors log parser.	
	If you need to adjust communication settings to match the ones of your gateway, grab the latest firmware on github, make the necessary adjustments (likely in config.h) and reprogram the device using the instructions provided with the firmware.	
The "Liaison sans-fil" indi-	It likely means that the firmware was not able to initialize the Nordic Semiconductor nRF24 radio.	
cator lights	To make investigating easier, the firmware outputs log messages which might give you a better idea of what is happening. Connect the module to a computer using a USB cable, open a serial port with 115200	
up solid red.		
ont coming, and copy-paste the messages into the mysensors log parser.		sensors log parser.
	Devices are fully tested before being shipped, so this should never happen. But maybe something happened during transit? Whatever it is, no worries, reach out using the contact information provided at the end of this manual and we will figure something out.	
The "Liaison Linky" indi- cator blinks red.	It means the firmware is not able to decode data sent by the Linky meter. Maybe Enedis has deployed a new firmware, breaking compatibility. Whatever it is, no worries, reach out using the contact information provided at the end of this manual and we will figure something out.	

6. Schematic



7. Contact

If you need any help, or share your experience, be it good or bad, don't hesitate to reach out. Send us a message on Tindie by clicking on the "Contact Store" button, or join our Discord server.