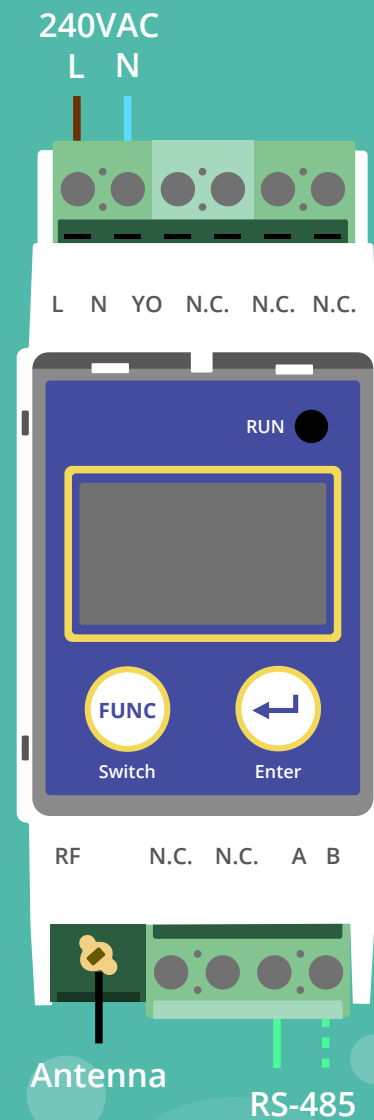


Setting up your LoRa Device

Installation Guide



Set to LoRa Radio Mode

All LoRa's must be set to Radio Mode to work with GivEnergy inverters. Using the buttons on the front of **both** LoRa's, one at a time.

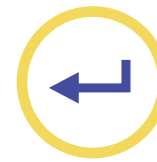
1. Hold **FUNC**



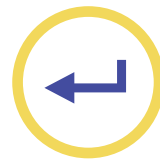
2. Tap **FUNC** to highlight **System**



3. Tap **ENTER**



4. Tap **ENTER** until display reads LoRa Mode



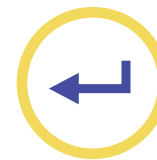
5. Tap **FUNC**



6. Tap **FUNC** to highlight **Reboot**



7. Tap **ENTER**



Change Radio Frequency

It is possible that the LoRa's could get interference from other wireless devices. If this is the case, it is possible to change the frequency that the LoRa operates on using the buttons on the front of **both** LoRa's, one at a time.

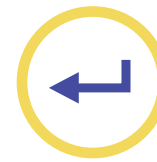
1. Hold **FUNC**



2. Tap **FUNC** to highlight *Frequency*



3. Tap **ENTER**



4. Tap **FUNC** to select character to change



5. Tap **ENTER** to increase digit



6. Tap **FUNC**



7. Tap **FUNC** to highlight



8. Tap **ENTER**



Change Port Settings

In some cases the port that the LoRa communicates with the Inverter and Battery on may need configuration. Using the buttons on the front of **both** LoRa's one at a time.

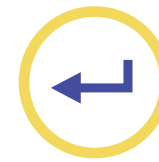
1. Hold **FUNC**



2. Tap **FUNC** to highlight **UART**



3. Tap **ENTER**



4. Tap **ENTER** to select baud rate (**9600 bps**)



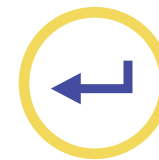
5. Tap **FUNC**



6. Tap **FUNC** to highlight **reboot**



7. Tap **ENTER**

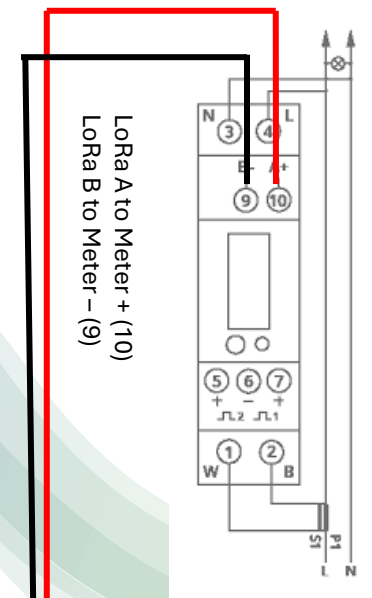
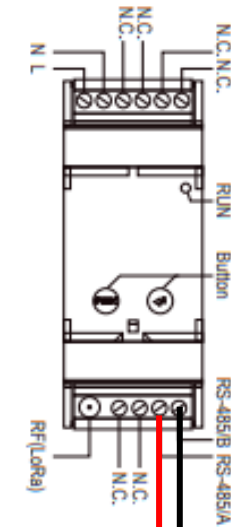
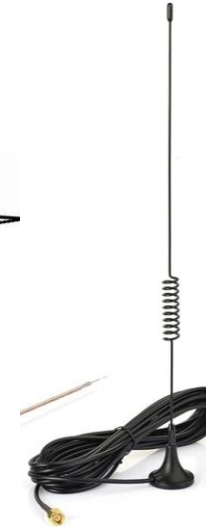
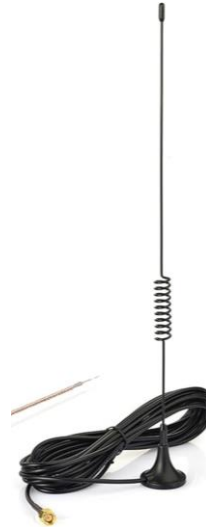
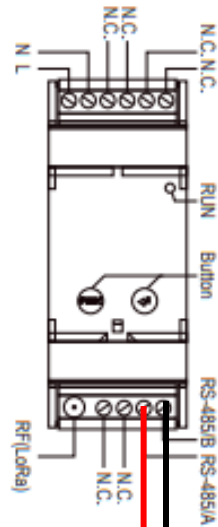


How to Wire GivEnergy LoRa Data

Gen3 Example



Inverter + to LoRa A
Inverter - to LoRa B



Note White is A and colour is B
Adopt this as standard.
Actual pair is irrelevant
IMPORTANT – Use 1 Pair ONLY



Note White is A and colour is B
Adopt this as standard.
Actual pair is irrelevant
IMPORTANT – Use 1 Pair ONLY

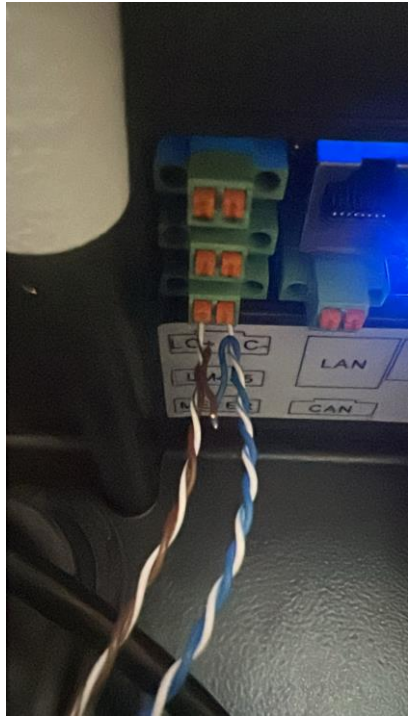


Useful Links
Manual for Setting Channels
<https://givenergy.co.uk/wp-content/uploads/UK-Installation-Manual-LoRa.pdf>

What NOT to Do



Here is 1 wire from 2 pairs - INCORRECT



Here 1 pair used for A and 1 for B - INCORRECT



LoRa Transceiver Kit

GIV-LORA-LCD

User Guide



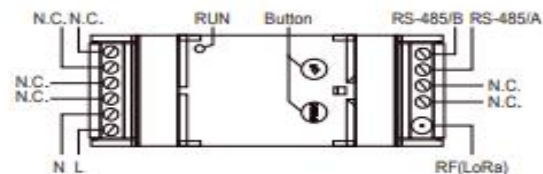
Function

ITEM	FUNTION
Mode	LoRa
OTA	RS-485/ LoRa
Command	AT(Over RS-485)
Baud Rate	1200bps/2400bps/4800bps/9600bps(Default)
Local Configuration	RS-485 Baud Rate / Wireless NetID / Channel

Electrical

PARAMETER	Min.	Typ.	Max.
Rated Voltage	85V~	220V~	420V~
Rated Current	--	0.01A	--
Frequency	--	50Hz	60Hz

Terminal Function



Packaging List

	OBJECTS	QUANTITY
1	GIV-LORA-LCD	2
2	Antenna	2
3	User Guide	1
4	Certification	2

Product Description

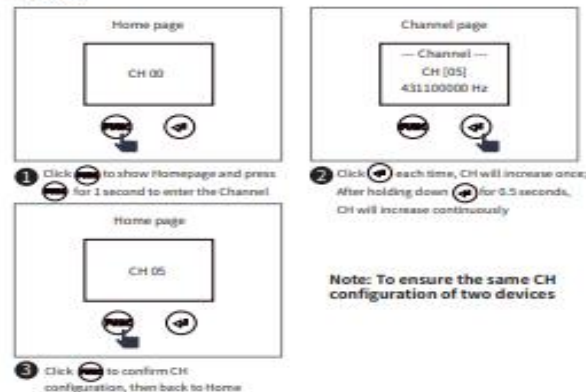
The LoRa Transceiver Kit GIV-LORA-LCD is an RS-485 device that uses an enhanced LoRa module, works in the data transmission mode, supports various protocols, and can realize long-distance wireless network communication by joining the LoRa network. It is widely used in intelligent buildings, municipal lighting, tunnel lighting, monitoring and automation and other industries. This product is installed with 35mm DIN standard rail, with a width of 2P, and is easy to install in the standard switch box and chassis. High performance 32bit processor is adopted, with built-in OLED dual color display screen to display parameters. Double buttons can be used to turn pages for viewing and modify key communication parameters. It is characterized by fast installation, simple configuration, high reliability, low power consumption, small size and light weight.

Model Description



TERMINAL	DIRECTION	FUNTION	NOTE
L	Input	Live Wire	AC input, no distinction between Neutral and Live Wire
N	Input	Neutral Wire	
N.C	--	--	No function, must be suspended
RS-485/A	--	RS-485/A port	Connect to host/AT Configuration
RS-485/B	--	RS-485/B port	
RF(LoRa)	--	RF Antenna Interface	MMCX female, connected to LoRa antenna

Setting



Specific Characteristic

- Rated Voltage 85-420V~
- Rated Current 0.01A
- Frequency 50/60Hz
- 128 × 64 double color OLED
- 1-way RS-485(9600bps Default)
- LoRa transparent transmission to RS-485
- The maximum output power of LoRa is +19dBm
- Operating temperature: - 25 °C to +70 °C
- Storage temperature: - 40 °C to +85 °C

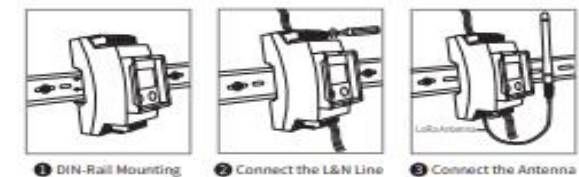
Wireless Parameters

PARAMETER	NOTE	Min.	Typ.	Max.
Frequency	433	428MHz	--	438MHz
	470	470MHz	--	510MHz
	868(Customized)	863MHz	--	870MHz
	915(Customized)	902MHz	--	928MHz
RF Power	--	--	+17dBm	+19dBm
Receiving Sensitivity	SF=7, BW=125KHz	--	-123dBm	--

Application Cenarios

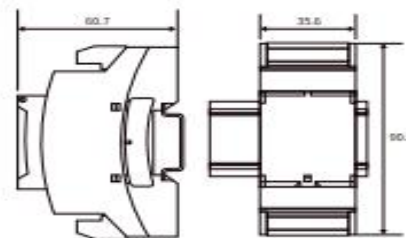


Installation



Dimension

Unit: mm, Tolerance: ±0.2mm.



Certification

This product has been strictly inspected to meet the standards approved for sale.

Inspector: _____



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- The direct purchaser shall notify the company in writing within 14 days upon discovery of the defect;
- Direct buyers pay to send back to the company;
- The product should be within the warranty period.

The Company is only responsible for the defects of the products caused by the occasions or circumstances meeting the technical conditions of the products, and does not make any warranty, guarantee or written statement for special applications. The company also makes no commitment to the reliability of its products in products or circuits.