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communication is everything

Wanesy™ Wave
Quick Start Guide

Thank you for choosing Kerlink.
We are proud to be part of your project.

1. Need help?

- In order to provide the most updated technical documentation, as well as considering and saving the environmental resources, Kerlink is preferably providing "Online documentation".
- Kerlink is gathering all the technical information on a Wiki: http://wikikerlink.fr/
  - If you don't have yet your Wiki login/password please request them to **support@kerlink.com** (note that the "Product ID" of one of your products will be required).
  - How to find the "Product ID"? Please look at the Wanesy™ Wave sticker placed on the back side of the product enclosure.

- On the Wiki, Kerlink is proposing a comprehensive set of documents and information for self-help:
  - Setup of Wanesy™ Wave: Connection to the network, Firmware update
  - System Management: Connection, login and credentials.
  - Network Management: Backhaul configuration, Firewall, IPsec / OpenVPN.
  - LoRa® Features, KerOS customization, Support and resources (FAQ, Troubleshoot the gateway …)

- For any Warranty or Maintenance related request (Trouble shooting, help …),
  - If purchased from a distributor, please contact the Distributor directly for Level1 support.
  - If purchased from Kerlink directly, please open an "Assistance Request" via our online ticketing tool called OTRS (Open-source Ticket Request System).
  - If you don't have yet your OTRS login/password, please request them to support@kerlink.com (note that the Product Id or any serial number of one of your products will be required).

  Access to Kerlink "Technical Support team" for Maintenance Services is conditioned to a valid Maintenance contract.

For any other question related to our product, please contact our distributor or Kerlink sales@kerlink.com or + 33 2 99 12 29 00.

2. Manufacturer

Kerlink, 1 Rue Jacqueline Auriol - 35235 Thorigné-Fouillard, France
Tel.: +33 (0)2 99 12 29 00 - www.kerlink.com

3. Safety

- Please, read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, or maintain it.
- The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

⚠️	• Refers to a critical situation
	• In case of non-compliance, it may result in property damage
🛈 Information	• Refers to useful information during manipulations.

4. Overview of Wanesy™ Wave

⚠️	• Only use the Wanesy™ Wave for its intended «Normal conditions of use».
	• Maintenance and repair must be carried out by qualified personnel authorized by the manufacturer.
	• The enclosure of the Wanesy™ Wave must not be opened by Customer
	• The Wanesy™ Wave should only be used with accessories or spare parts supplied by your reseller.

5. Overview of Wanesy™ Wave

Symbol	Description		Symbol	Description
Wanesy™ Wave	Type of equipment			QR Code
5V ⎓ 1A	Power supply information		CE or other marking	CE marking indicating that the product complies with current European directives or other marking marking depending on the country
Board ID	Serial number of board		RoHS COMPLIANT	Marking indicating that the product complies with RoHS directives
Final product ID	Serial number of product		⊠	Do not dispose of with domestic waste
MAC ADDR	MAC address			
EUI	Extended Unique Identifier		⚠	Refer to the installation instructions before powering up
IP 30	Indice of protection			

6. Installation of Wanesy™ Wave
6.1 Mounting of the enclosure

Two Ø3.3mm holes are usable to fix the product.
These holes are hidden behind the blind lids and will not be visible.
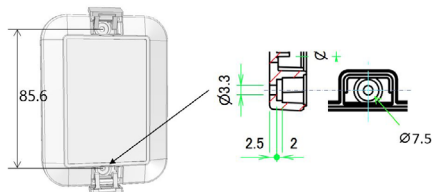
It can also be mounted using straps and accessories (WPMB-M3). This accessories set is not included per default within our product. It can however be ordered directly through our casing manufacturer.
The Wanesy™ Wave may be mounted on a wall using the two oblong holes.
Only two screws (not included) are needed, all mounting information is mentioned on the below drawing.
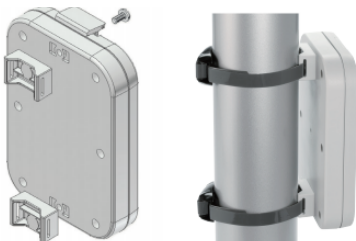
⚠	• The Wanesy™ Wave enclosure must be mounted on any concrete pedestal, concrete wall or any non-flammable surface (UL94-V0). • It must not be mounted on a flammable surface.

6.2 Setting connections

In order to connect the Wanesy™ Wave, you just have to plug the product on the micro-B USB power supply.

ℹ️ Information	The Wanesy™ Wave is powered by micro-B USB 5Vdc ±5% / 1A. Please check accessories preconized by Kerlink. Operating temperature range: -20°C to +55°C Humidity: 5% to 95% Altitude max. < 2000m

6.3 First connection

The LEDs are used to indicate the following behavior:

Item	Specification
LED 1 (Green):	ON: USB Power connected OFF: USB Power disconnected
LED 2 (Red):	ON: LoRaWAN join request sent, waiting for accept. OFF: During boot or LoRaWAN network joined.

For more information on the Quick start of Wanesy™ Wave Gateway, please consult the Kerlink Wiki: http://wikikerlink.fr/wanesy-productline/wave

7. Declaration of Conformity
7.1 Wanesy™ Wave 868
Simplified EU Declaration of Conformity

Hereby, Kerlink, declares that the radio equipment type Wanesy™ Wave 868 is in compliance with Directive 2014/53/EU.

The full text of the EU Declaration of Conformity is available at the following internet address: www.kerlink.com/support

In Europe, the Wanesy™ Wave 868 station must comply with the ERC 70-03 requirements regarding duty cycle and maximum EIRP. They are summarized in the following table:

ERC 70-03	Frequency (MHz)	Power	Duty cycle
h6	868-868,6	14dBm ERP	1%

	The power supply of the Wanesy™ Wave 868 must be a limited source of power.
Information	Note that some countries in Europe may have specific frequency ranges, EIRP and duty cycles regulations. Check the local regulations before installing and commissioning the Wanesy™ Wave 868. For other countries, outside Europe, check the frequency range, the maximum EIRP and duty cycle allowed.

7.1 Wanesy™ Wave 915
The Wanesy™ Wave 915 is in compliance with FCC regulations.

The associated FCC identifier of the Wanesy™ Wave 915 is:

Model: Wanesy™ Wave

FCC ID: 2AFYS-KLKWAVE915

	The power supply of the Wanesy™ Wave 915 must be a limited source of power. Note that: KERLINK IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.
Information	Some conditions have to be respected to maintain the FCC compliance of the devices in the USA. Please contact your reseller to have details. For other countries, check the specific regulations regarding maximum EIRP and duty cycle allowed.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference
by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

This equipment complies with RSS102's and FCC radiation exposure limits set forth for an uncontrolled environment under the following conditions:

1. This equipment should be installed and operated such that a minimum separation distance of
20cm is maintained between the radiator (antenna) and user's/nearby person's body at all times.
2. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
This device must be professionally installed.

8. Disposal / recycling

Do not dispose of the product with household waste. For proper disposal, contact a waste disposal company. The product packaging (cardboard and liners) can be removed with used paper.

The Wanesy™ Wave contains a battery. Do not incinerate or puncture battery. Do not expose to temperatures higher than +55°C.

9. Warranty

Contact your reseller for warranty conditions of the Wanesy™ Wave.

⚠️	The Wanesy™ Wave is not warranted by Kerlink in case the enclosure is opened, modified, painted, branded out, outligned by CUSTOMER for any reason. Feel free to contact us for a guideline for the branding.

10. Accessories and Professional Services

For additional information, on available accessories and Professional Services please contact your reseller.

11. Give us your feedback

Your shopping and operational experiences are very important to us.
We would like to invite you to leave review on our products and services.
We will appreciate your time and efforts.
We would be very proud to get any photo of your gateway installation.
Can you share them to dmk@kerlink.com

12. Find us in Social Media

We would like to hear from you: any tips, any news to share ?

@kerlink_news

Kerlink

Kerlink channel

We stay at your disposal for any help on your project.
Yours sincerely.

Kerlink Team

Kerlink internal use only