LORIX *One*

COMPACT AND ROBUST PROFESSIONAL GRADE LoRaWAN® GATEWAY

Quick start guide

Revert N connector

10/100Mbps ethernet passive PoE 24VDC

USB/factory reset Bootloader mode

Status LED

USB mini-B service connector

Storage extension microSD slot

WARNING: Please make sure the gateway is never powered without a compatible mounted antenna.
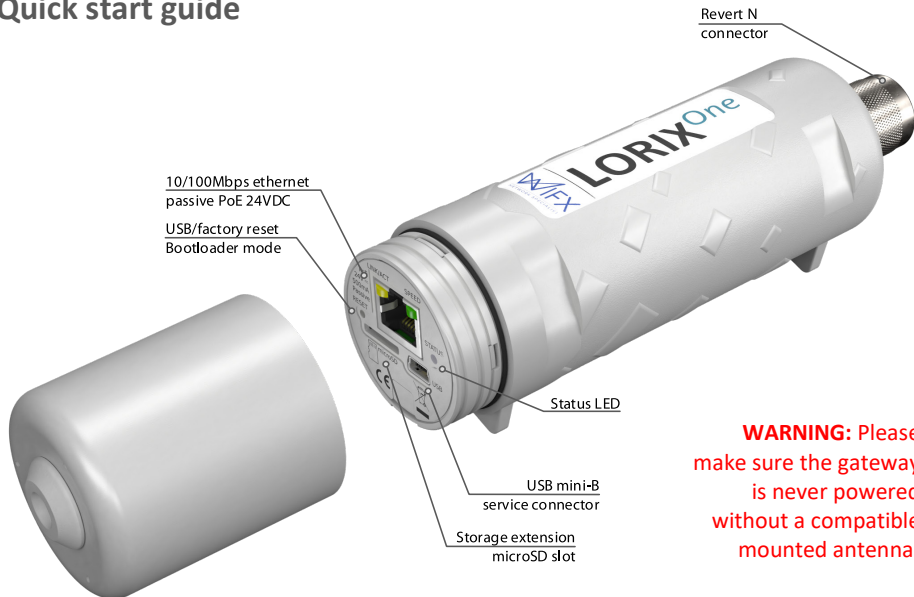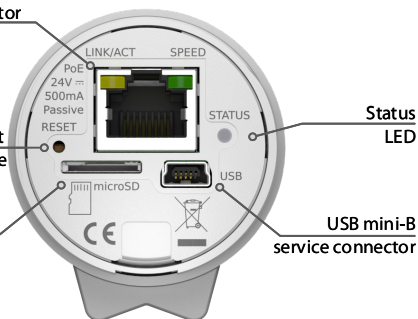
INTRODUCTION

Thank you for purchasing the LORIX One outdoor LoRaWAN® gateway made by Wifx. This quick start guide is made to help you to quickly install and use your product. It includes in addition the warranty terms.

OVERVIEW

Ethernet connector
PoE injection

USB/factory reset
Bootloader mode

microSD
slot

LINK/ACT   SPEED

PoE
24V ⎓
500mA
Passive
RESET

STATUS

microSD

USB

Status
LED

USB mini-B
service connector

CONTENT

The package contains:

- LORIX One LoRaWAN® gateway
- UV resistant zip ties (x2)
- Passive PoE injector
- 24VDC/12W switching adapter HNP12-240L6
- LoRa band antenna
- Quick start guide

IMPORTANT NOTICE CONCERNING THE FIRMWARE

The LORIX One is shipped with the latest available version of the LORIX OS.

You will find a complete step-by-step procedure in our new intuitive and comprehensive documentation at iot.wifx.net/docs/go/userguide.
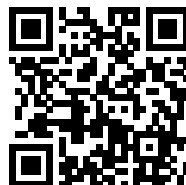
INSTALLATION AND CONSTRAINTS

The product is designed to be placed **vertically** with the antenna **upwards**. Mounting the product differently doesn't ensure waterproofing or could decrease thermal performance.

In addition, the product needs the IP65 antenna to be well fixed to guarantee a global IP65 level.

To install it, start by opening the low side cap, remove the cable gland and pass the cable connector through the hole.

Once the cable is connected into the Ethernet PoE connector, put back the cap and screw it until it blocks. You can now insert the cable gland around the cable and push it into the hole, the flat side inside the cap. The cable gland assures the sealing reason why it's important to insert it correctly.

Connect the other side cable into the PoE injector (socket side) and the switching adapter into the power socket of the PoE injector. Once the switching adapter powered, the LORIX OS starts and is accessible after a minute.
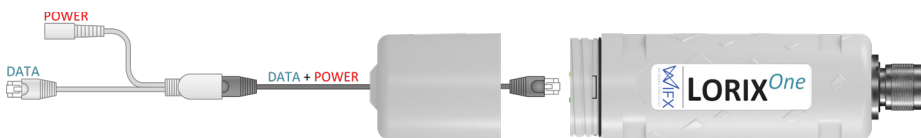
PoE Ethernet port supports 24VDC. Use only the provided power supply adapter. The max consumption is 3W.

ACCESSING THE CONFIGURATION TERMINAL

The product is accessible either by SSH using its Ethernet port or by USB using a mini-B cable. Regardless the way you access it, the login is **admin** and the password is **lorix4u**.

THROUGH SSH

The LORIX OS is configured as a DHCP client by default. You need a DHCP server in your network to attribute a correct IP address. Please consult our online documentation for static IP access configuration (see our **LAN CONFIGURATION** section).

Power up your product and access it by the IP address given by your DHCP server or using mDNS with the address lorix-one-<last 6 digits of the MAC address>.local if your network allows it.
Example: For the MAC address **XX:YY:ZZ:AA:BB:CC**, the address is **lorix-one-aabbcc.local**.
The MAC address is located on the back-side sticker of the product.

THROUGH USB

Power up your product and connect a USB cable into the mini-B USB service connector which will act as virtual COM port.

In Linux, a serial port program like Minicom can be used to access the newly created COM port under **/dev/ttyACMx**.

In Windows 10, the driver will be automatically installed and a virtual COM port is created (can be seen in the Device Manager). A program like Putty can be used to access the COM port named **COMx**.

The connection parameters are 921600 bauds, 8 data bits, 1 stop, no parity and no flow control.

FACTORY RESET

A factory RESET will clear all the parameters to their initial value as freshly programmed from factory. Parameters include but are not limited to network and LoRa configuration, password, etc.

This can be made easily by pressing the RESET button for more than 10sec, until the status LED blinks. It will then reboot, restore the parameters by default and will be ready after the status LED stops blinking quickly.

CONFIGURATION

Most of the system is protected against wrong manipulation allowing most of commands and files only in root mode. Modifications can be made using explicitly the command sudo :

```
lorix-one-aabbcc:/$ sudo mkdir /tstdir
```

The password is then asked and kept in cache for 5min.

LAN CONFIGURATION

To change the network configuration, please consult our online documentation at iot.wifx.net/docs/go/networking

CLOUD APPLICATIONS AND SERVICE

By default, the gateway is not configured with any specific packet forwarder. You can easily configure that through the graphical web interface. For more info, you can consult our online documentation at iot.wifx.net/docs/go/forwarding

MORE INFORMATION

Complementary information can be found on our online documentation: https://iot.wifx.net/docs

RETURN MERCHANDISE AUTHORIZATION

Wifx Sàrl offers a warranty of 24 months on the LORIX One gateway from the date of the invoice. The product is warranted to the purchaser to be free of defects in material and workmanship. The warranty does not cover damage caused by mechanical shocks, electrical shocks, natural disasters or other damages caused by accident or by misuse of the product.

Before returning a damaged item to Wifx Sàrl, please send an email to rma@iot.wifx.net with the MAC address of the gateway and provide as much information as possible concerning the problem. A RMA number will be assigned to you.

Wifx Sàrl does not offer any technical repair on products which are out of the warranty period. If the warranty of the returned merchandise has expired, Wifx Sàrl will return the merchandise to the customer at his/her own expense. If the customer does not claim the rejected items within 12 months, Wifx Sàrl has the right to destroy them.
Please ensure that, if there is a problem with the gateway and that it does not function properly before returning it. If this is not the case, the customer will have to cover for the shipping expenses and up to 50 CHF for testing each gateway if the problem has not been detected.

IMPORTANT NOTICE before returning merchandise makes sure that:
- The warranty is still valid (check the date of the invoice)
- The problem does not come from the software
- You have received your RMA number for the return by e-mail

The shipping costs for the return of merchandise are at the customer's expense. If the reparation is done under warranty, Wifx Sàrl will return the merchandise to the customer without any cost. The RMA number must be mentioned on the delivery note. Please include a copy of the invoice to prove that the warranty is still valid. The content of the package must correspond to what is mentioned on the RMA form, otherwise the package will be immediately returned. In this case, the customer will cover the shipping costs.

The returned merchandise must be properly packaged to prevent any damage during transport. Such damage can false the analytical result and/or cancel the validity of the warranty. Please send the merchandise to the address of the RMA (which will be issued upon approval of your RMA form).

USEFUL DATA

The returned merchandise for repair must be unlocked, or provided with the full password and access information. Based on initial investigations, Wifx support may ask you to send only part of the kit, otherwise, please send the whole configuration including accessories.

Please inform us about any modification concerning your company. E-mail: info@iot.wifx.net
For any RMA questions, contact rma@iot.wifx.net

DECLARATION OF CONFORMITY

English	Hereby, Wifx Sàrl, declares that this LORIX One device, is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EC. This device complies with Part 15 of the FCC rules and with ICES-003 of industry Canada for a Class A digital apparatus.
Français [French]	Par la présente Wifx Sàrl déclare que l'appareil LORIX One, est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/CE. Cet appareil est conforme à la section 15 du règlement de la FCC et de l'ICES-003 de l'Industrie Canada pour un appareil numérique de classe A
Deutsch [German]	Hiermit erklärt Wifx Sàrl, dass sich dieses LORIX One Gerät, in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 2014/53/EG befindet.
Italiano [Italian]	Con la presente, Wifx Sàrl, dichiara che questo dispositivo LORIX One, è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti della direttiva 2014/53/CE.
Português [Portuguese]	Wifx Sàrl declara que este dispositivo LORIX One está conforme com os requisitos essenciais e outras disposições da Directiva 2014/53/CE.
Español [Spanish]	Por medio de la presente Wifx Sàrl declara que este dispositivo LORIX One cumple con los requisites esenciales y cualesquiera otras disposiciOnes aplicables o exigibles de la Directiva 2014/53/CE.
Česky [Czech]	Wifx Sàrl tímto prohlašuje, že toto LORIX One zařízení, je ve shod se základními požadavky a dalšími Příslušnými ustanoveními směrnice 2014/53/ES.
Dansk [Danish]	Hermed, Wifx Sàrl, erklærer at denne LORIX One enhed, er i overensstemmelse med de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EF.
Nederlands [Dutch]	Hierbij verklaart Wifx Sàrl, dat deze LORIX One apparaat, in overeenstemming is met de essentiële Eisen en de andere relevante bepalingen van richtlijn 2014/53/EG.
Eesti [Estonian]	Käesolevaga Wifx Sàrl kinnitab, et antud LORIX One seade, on vastavus olulistele nõuetele ja teistele asjakohastele sätetele direktiivi 2014/53/EÜ.
Suomi [Finnish]	Täten Wifx Sàrl vakuuttaa, että tämä LORIX One laite, on yhdenmukainen olennaisten vaatimusten ja muiden sitä koskevien direktiivin 2014/53/*EY.*
Ελληνική [Greek]	Δια του παρόντος, Wifx Sàrl, δηλώνει ότι αυτή η συσκευή LORIX One είναι σε συμμόρφωση με τις βασικές απαιτήσεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1995/5/ΕΚ.
Magyar [Hungarian]	Ezennel Wifx Sàrl kijelenti, hogy ez a LORIX One készülék megfelel az alapvető követelményeknek és más vonatkozó 2014/53/EK irányelv rendelkezéseit.
Íslenska [Icelandic]	Hér, Wifx Sàrl, því yfir að þetta LORIX One tæki er í samræmi við grunnkröfur og önnur viðeigandi ákvæði tilskipun 2014/53/EB.
Latviski [Latvian]	Ar šo, Wifx Sàrl, deklarē, ka LORIX One ierīce, ir saskaņā ar būtiskajām prasībām un citiem attiecīgiem noteikumiem Direktīvā 2014/53/EK.
Lietuviškai [Lithuanian]	Wifx Sàrl deklaruoja, kad šis LORIX One įrenginys atitinka esminius reikalavimus ir kitas 2014/53/EB Direktyvos nuostatas.
Malti [Maltese]	Hawnhekk, Wifx Sàrl, tiddikjara li dan il-mezz LORIX One huwa konformi mar-rekwiżiti essenzjali u dispożizzjonijiet rilevanti oħrajn ta 'Direttiva 2014/53/KE.
Norsk [Norwegian]	Herved Wifx Sàrl, erklærer at denne LORIX One enheten, er i samsvar med de grunnleggende kravene og andre relevante bestemmelser i direktiv 2014/53/EF.
Polski [Polish]	Niniejszym, Wifx Sàrl, oświadcza, że urządzenie LORIX One jest zgodny z zasadniczymi wymaganiami oraz pozostałymi stosownymi postanowieniami Dyrektywy 2014/53/WE.
Română [Romanian]	Prin prezenta, Wifx Sàrl declară că acest dispozitiv LORIX One este în conformitate cu cerinţele esenţiale şi alte prevederi relevante ale Directivei 2014/53/CE.
Slovensky [Slovak]	Týmto Wifx Sàrl, prehlasuje, že toto LORIX One zariadenie, je v súlade so základnými požiadavkami a ďalšími relevantnými ustanoveniami smernice 2014/53/ES.
Svenska [Swedish]	Härmed Wifx Sàrl, intygar att denna LORIX One enhet är i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EG.