fencee Electric **fencing**
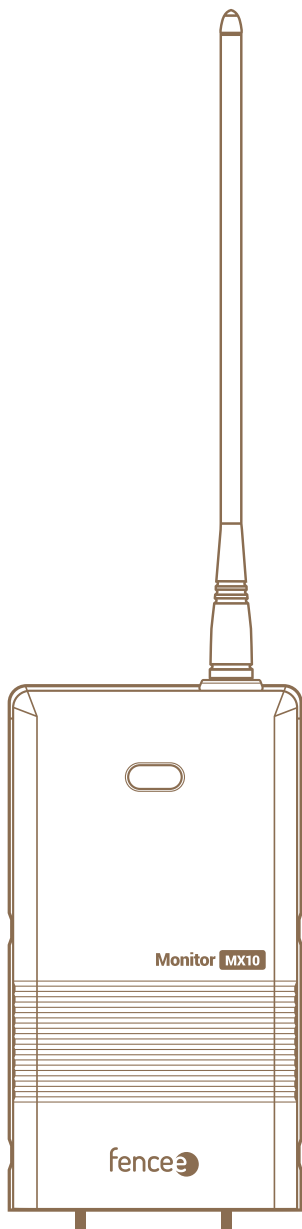
Monitor MX10

REMOTE MONITORING
OF FENCE PARAMETERS

WORKS ONLY WITH:

FENCE **Wi Fi** GATEWAY GW100

FENCE **GATEWAY** GW10

SMART FARMING

RF TECHNOLOGY
Wireless RF connection with the Gateway.

IT DOES NOT NEED A SIM CARD
No additional operating costs.

www.fencee.eu
www.fenceefarm.com
📞 **+420 730 893 828**

SMART FARMING **fencee Cloud**
To download

Download on the **App Store**

GET IT ON **Google Play**

Thank you for purchasing the fence MX10 Monitor from VNT electronics s.r.o.

The device complies with the safety regulations according to the valid
law as well as the relevant EU regulation (CE).
The device complies with the Council of Europe Directive 2014/53/EC, meets the requirements
of the General License of the Czech Telecommunication Office according to the general authorization
No. VO-R/10/05.2014-3, and it also complies with the below requirements of the standards and regulations
applicable to this type of equipment:

2014/35/EU | 2014/30/EU | R&TTE EN300-220 a EN 61000-6-3:2007 + A1:2011

ETSI EN 301 489-1 V1.9.2 | ETSI EN 301 489-3 V1.6.1 | ETSI EN 300 220-2 V.2.4.1

ETSI EN 60950-1 ed.2:2006 /A1:2010 /A11:2009 /A12:2011 /A2:2014/Opr.1:2012 EN 62479:2010

**We recommend that you read this manual carefully
before using the device and keep it for future reference!**

CONTENT

 YouTube
Find out all the information
about the Monitor in our video.

1. INTRODUCTION

Use this device to ensure better protection of your animals and land.

Local conditions and circumstances always affect the function of the device and therefore we cannot guarantee complete protection against breach of the fence. The energizer manufacturer does not warrant that there will be no breakdown of the fence installation and does not guarantee that animals cannot run away. The installation of a fence should increase the safety of the animals in the fence system or protect the land.
Please follow the instructions for use of this device.

Important Notice

- Switch off the electric fence before carrying out any work on the energizer or fence.
- Read the Safety Instructions carefully.
- When installing, make sure that you observe all safety regulations.
- Use only original spare parts.

2. OVERVIEW OF THE MAIN BENEFITS OF THE MONITOR

- LED indication
- Audible indication
- No SIM Card required
- Magnet controlled
- Possibility of connecting an external antenna
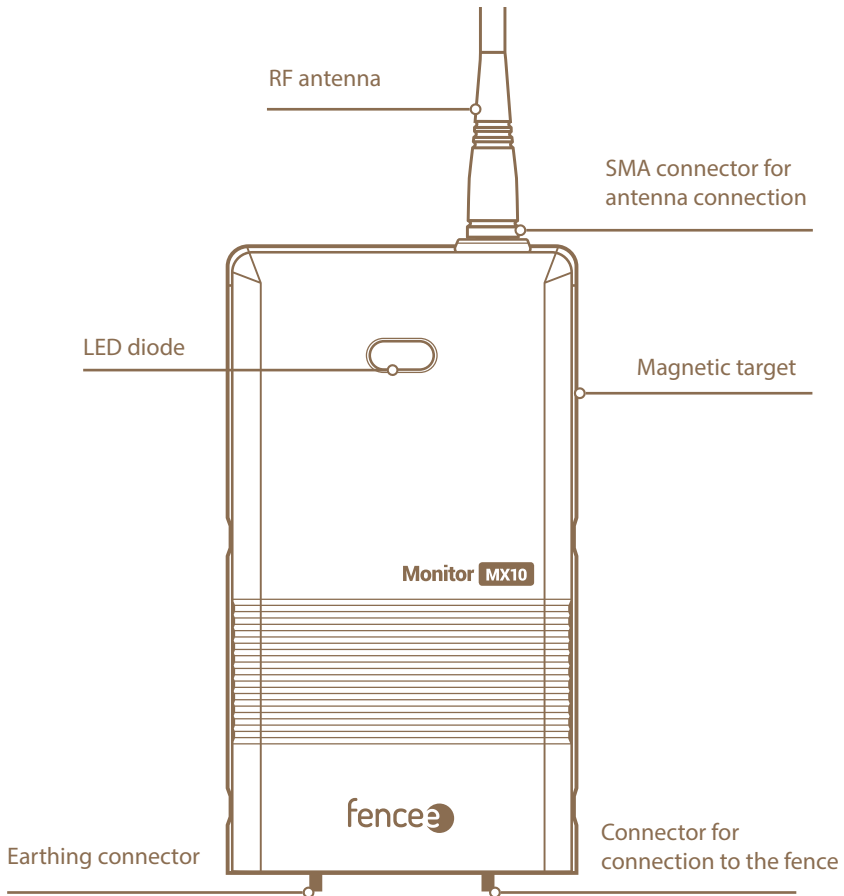
3. TECHNICAL PARAMETERS

- Range with basic antenna up to 10 km (included)
- Possibility of connecting an external antenna
  (extension cable 2 m or 10 m - range increase up to 30 km)
- RF transmission frequency - 869.525 MHz /22 dBm
- Power battery: 2 × C-LR14
- Dimensions: 78 × 144 × 42 mm
- Weight: 370 g

4. PACKAGE CONTENTS

- MX10 Monitor
- Two C-LR14 batteries
- Magnet with a string
- Earthing pin
- Earthing cable for grounding
- Connecting cable to the fence system
- RF Antenna
- 2 pcs plastic cable tie for mounting on a post

5. DESCRIPTION OF THE DEVICE

- The Monitor MX10 is used to measure voltage anywhere in your fence system.
- Up to 12 MX Control Monitors can be pair to a Gateway and divided the enclosure into multiple zones. Everything then communicates with the central Gateway and the RF energizers **fencee power DUO RF PDX** or **fencee energy DUO RF EDX** (energizer not included Monitor package)
- Using radio frequency technology, it transmits the measured data wirelessly to the central Gateway, where the values are shown on the display.
- In the event of a voltage drop at the measured point below the set limit, an alarm is sent and signalling to the Gateway immediately notifies the user of the fault.

RF antenna

SMA connector for antenna connection

LED diode

Magnetic target

Monitor MX10

fencee

Earthing connector

Connector for connection to the fence

Inserting the batteries

- Unscrew the screws and open the cover on the back of the Monitor.
- Insert two C-LR14 batteries according to the instructions in the plastic cover.
- Return the cover to its original position and tighten the screws firmly.

An opening
for the cable tie

LR14 / 1,5V

LR14 / 1,5V

2 × C-LR14

An opening
for the cable tie
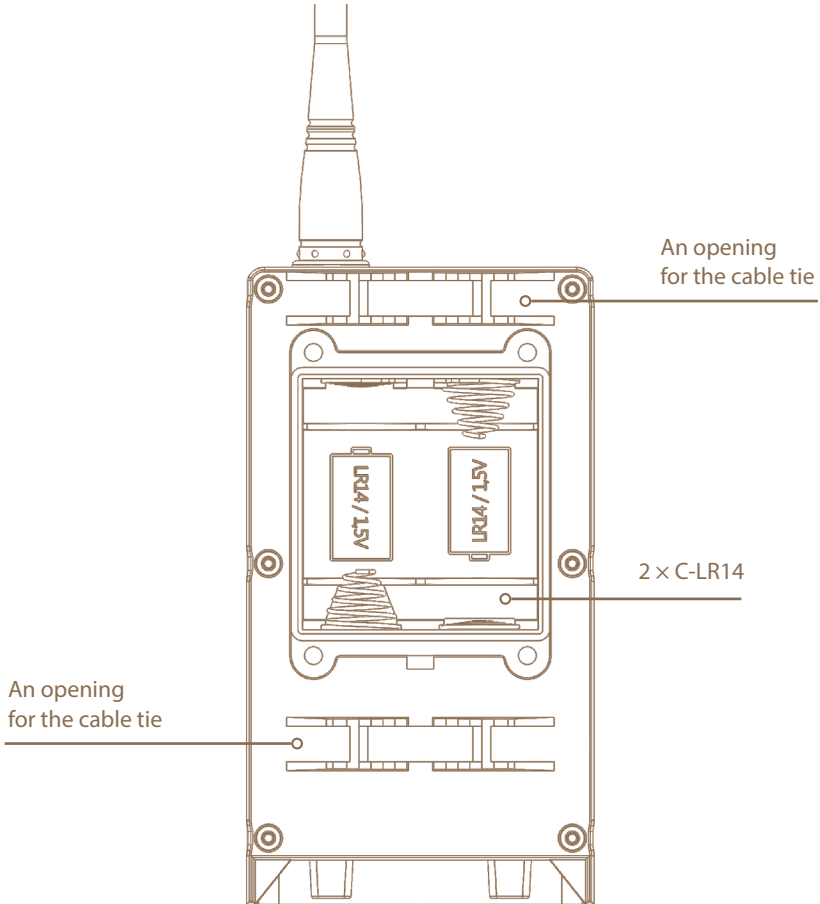
6. DESCRIPTION OF CONTROLS

Power supply

The Monitor is powered by two C-LR14 batteries, which must be inserted through the back cover and the correct polarity must be observed. It is recommended to install alkaline batteries for longer life. The battery status is indicated in the Gateway as a percentage. Battery life is about 1 year.

Control

The device is controlled by the included magnet, which must be attached to the target on the side of the MX10 Monitor. When the magnet approaches, the status of the Monitor is indicated by an LED diode:
Red = off
Green = on
If no LEDs light up, the batteries need to be checked and replaced.

Switching on

Place the magnet on the target for about two seconds.

The Monitor first beeps and lights up the red indicator LED. Subsequently, the Monitor will flash green and beep 3 times. The Monitor is now on and indicates its ON status by regular flashing green LED. When the Monitor is ON, it indicates its activity for a limited time of 2 minutes to save battery power.

Shutdown

By bringing the magnet closer to the target for about two seconds.

The Monitor first beeps and lights up the green indicator LED.
Then the Monitor will flash red and beep twice.
The Monitor is now turned off.

TIP: **You can check the status at any time - by bringing the magnet closer to the target for <1s. The colour of the LED indicates the status: red = off, green = on.**

7. PAIRING THE MONITOR WITH THE GATEWAY

First, the MX10 Monitor must be paired with the Gateway in order to display the measured data. Pairing is performed by the following steps:

1 The Monitor must be turned off. The LED flashes red.

2 Then hold the magnet to the Monitor target for >3 s. The Monitor will flash green and red LED simultaneously. The Monitor is now in pairing mode.

3 Place the Monitor and Gateway next to each other, up to a maximum distance of approx. 30 cm.

4 Now activate the pairing mode also on the Gateway - the exact description is given in the user manual for the Gateway.

- To select pairing, hold down the MENU button.

- Use the arrow keys to navigate to Pairing and press the ENTER button to access the Device Manager

- Use the arrow keys to navigate to an empty position

- Press the ENTER button shortly to confirm the item selection

- The correct action is confirmed by the Pairing new device information screen

5 Upon successful pairing, the Monitor beeps and flashes green. At the same time it also automatically shuts off so as not to trigger the alarm immediately, because it is not connected to the fence yet and has no voltage. It is displayed on the Gateway with a value of 0 kV.

6 The Monitor is now paired and can be installed on the fence system in the required measuring point.

> ⚠️ **The Monitor can only be paired to one Gateway - after pairing with another Gateway , the previous device will be deleted. The pairing mode ends automatically after 1 minute or it can be interrupted by applying a magnet to the target.**

8. CONNECTION WITH GATEWAY

Monitor measures each pulse in the fence system and sends the values to the Gateway every 15 minutes. If a voltage lower than the set limit is measured , data is sent to the Gateway immediately and an alarm is triggered.

Setting the low voltage alarm level on the fence system
The 3 kV limit is set at the factory. The user can freely adjust this value in the Gateway (see instructions for the Gateway). If the alarm limit on the Gateway is changed, it will not take effect in the Monitor until the next time new data is received, i.e. in a 15 min cycle.

Low battery alarm
The Monitor's low battery is indicated on the Gateway when it drops below 10%.
We recommend replacing it within 2 weeks at the latest.

Display of the paired Monitor on the Gateway and all available information about a specific device.
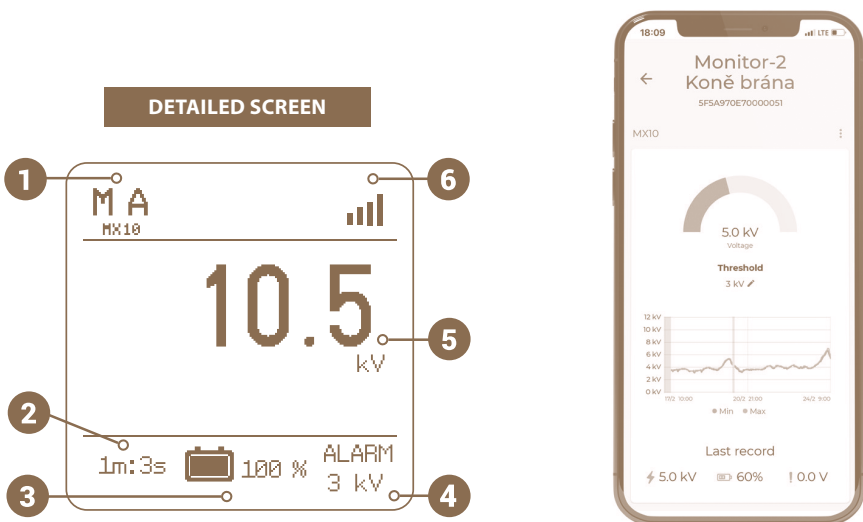
1 Type of device
2 Time since last data transfer
3 Monitor battery voltage status [%]
4 Current set value for triggering an alarm [kV]
5 Fence voltage value [kV]
6 Signal level between Monitor and Gateway

9. INSTALLING THE MONITOR ON A FENCE

After pairing the Monitor with the Gateway, it is possible to place the Monitor in the desired location of measurement on the fence system.
Before installation, it is necessary to turn off the energizer, in order to ensure safe handling.
We install the Monitor as shown in figure.
After installation, it is possible to turn on the energizer and turn on the Monitor.

Placement rules:
The Monitor can be installed outdoors in an fence system, it is resistant to normal weather conditions.

The Monitor can be easily installed with cable ties.
Never place the Monitor on the ground - in a humid or wet environment.
Never expose the Monitor to a continuous stream of water.

TIP: **For a better signal and connection within 30 km it is possible to use an external antenna.**
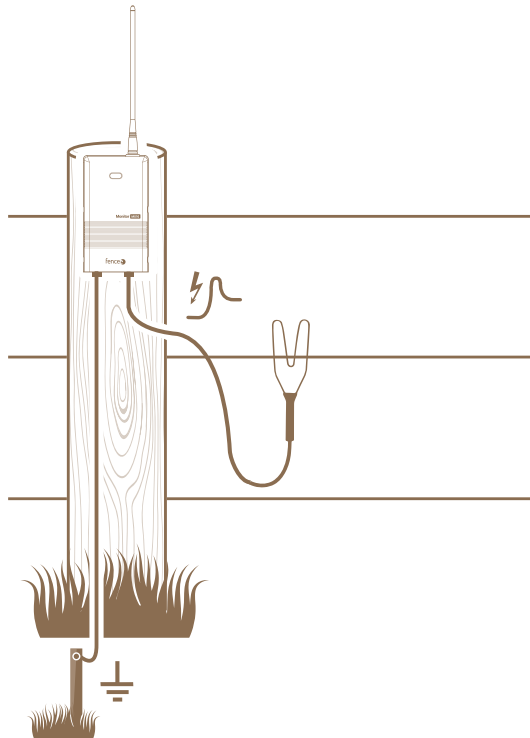
Installation examples

TIP: Put the monitor in the key sections where voltage needs to be checked (fence entrance) or where frequent problems, for example, with vegetation, by the forest, by the water, or when disconnected fence gate, can be expected.

Standard installation
Fence divided into sections. If the voltage of a monitor drops, the section and location of the problem can be easily identified.
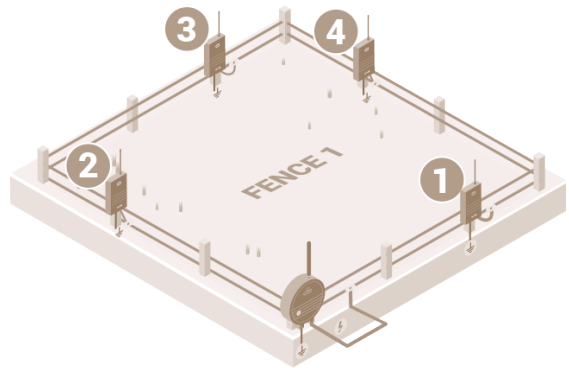

For fence entrances and in problematic locations - sections
Installation for an easy identification of the fence with a non-functional energizer or the location where problems may occur frequently, e.g. by the forest, by the water, in locations with dense vegetation.
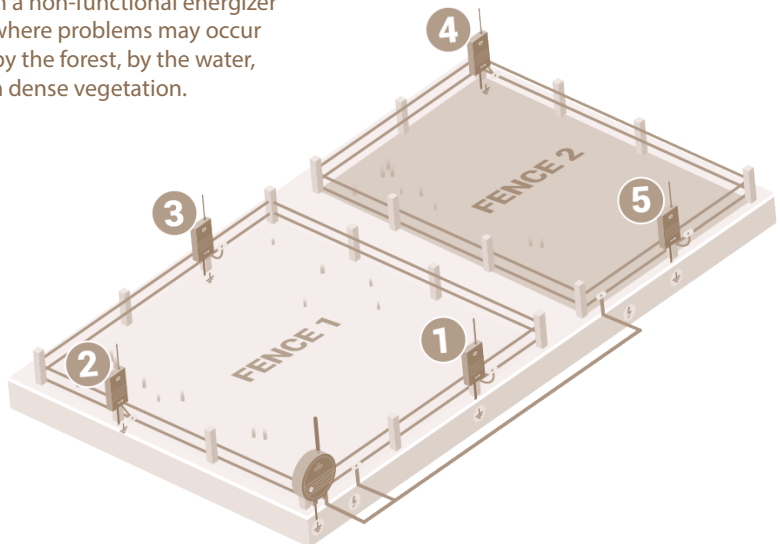
**For fence entrances**
Installation for quick identification of the fence with a non-functional energizer.
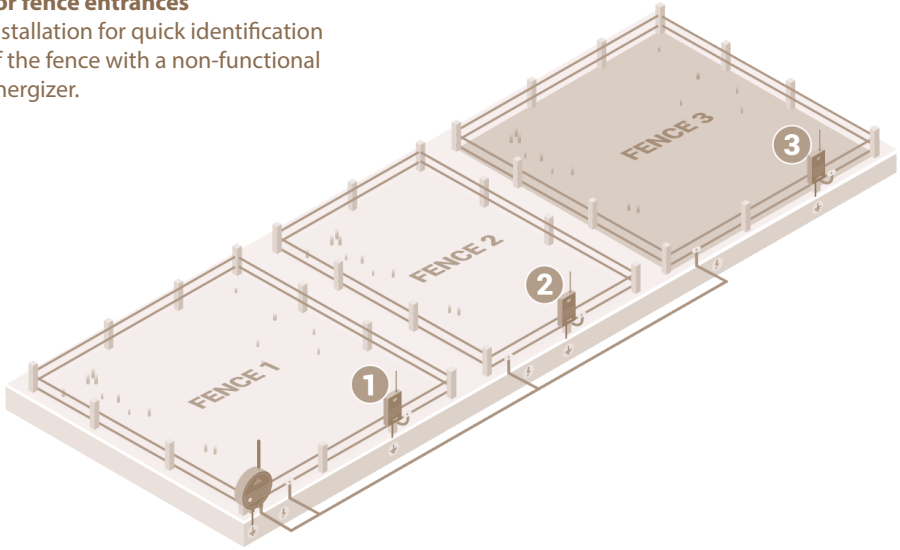
Control installation for closing a gate
The monitor can also be installed on the gate insulator eye. If the handle hook is disconnected and the eye lacks voltage, the monitor evaluates the situation and sends an alarm to the gateway.
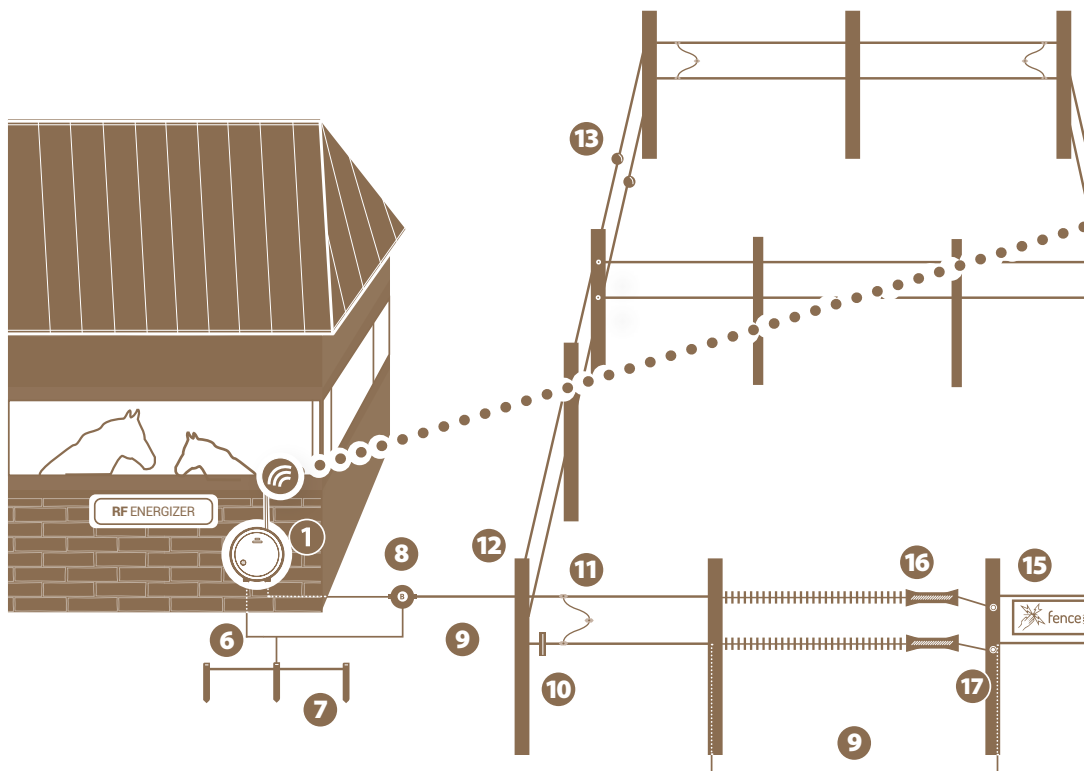

Connection
by high voltage cable.

SMARTeFARMING
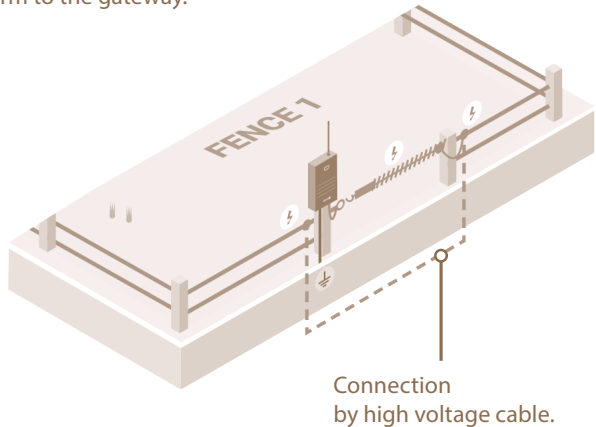
MODERN SMART FARM SYSTEM WORKS ONLY IN CONJUNCTION WITH RF ENERGIZERS:

fencee **power DUO RF PDX**
fencee **energy DUO RF EDX**

AND A CENTRAL CONTROL DEVICE:

FENCE **WiFi GATEWAY GW100**
FENCE **GATEWAY GW10**

1	Energizer fencee		**5**	External alarm		**9**	High-voltage connecting cable
2	Gateway GW100		**6**	Earthing cable		**10**	Conductor
3	Monitor MX10		**7**	Anticorrosive earthing rod		**11**	Line connector
4	External RF antenna		**8**	Lightning diverter		**12**	Fixed post

fencee
Cloud

External
Antenna

4

5

ALARM

2

GATEWAY GW100

14

fencee

fencee

1

RF ENERGIZER

3

Monitor
MX10
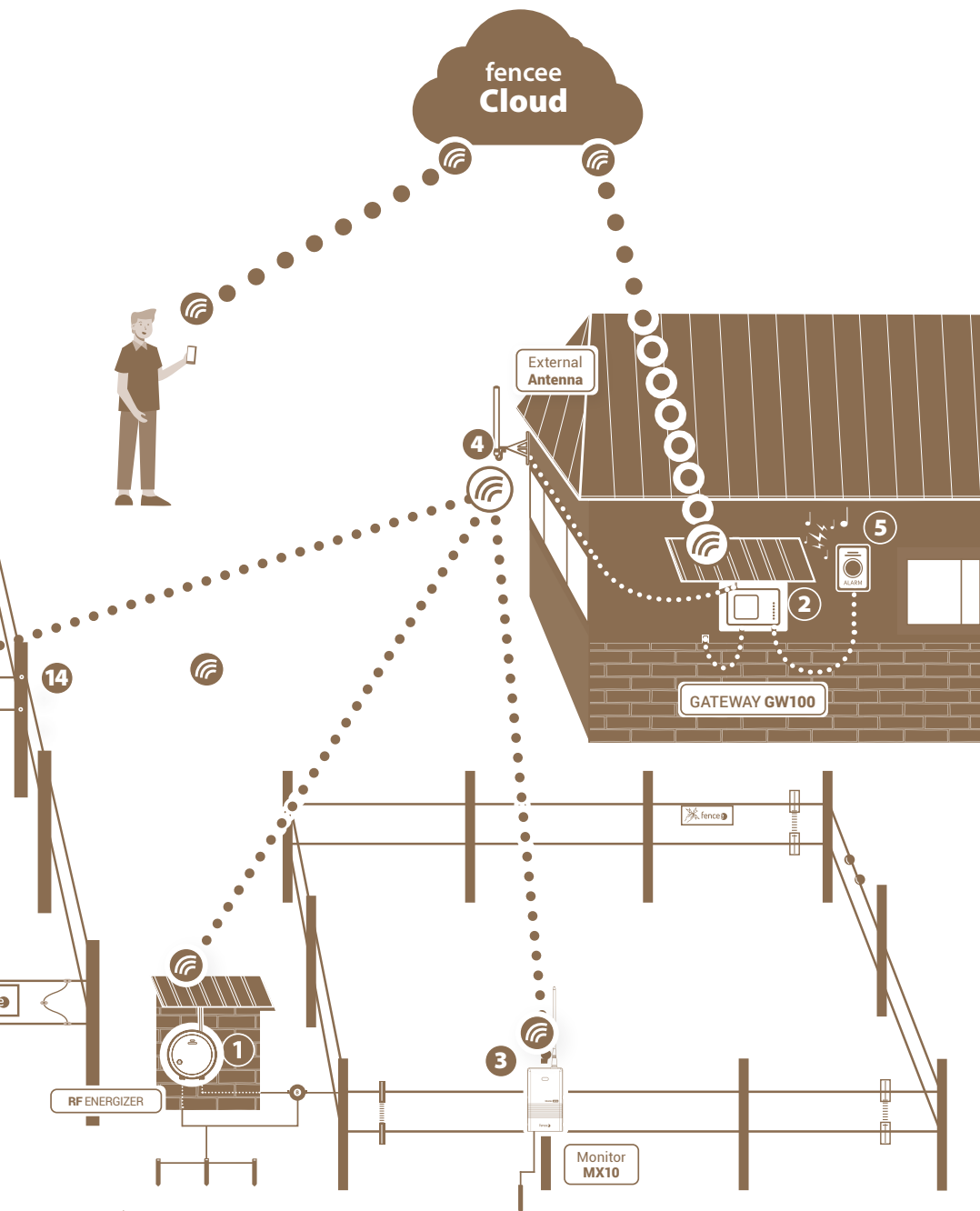
13	Tensioner		
14	Insulators	16	Gate handle
15	Warning sign	17	Insulator of gate

10. TROUBLESHOOTING - POSSIBLE FAULT SOURCES

Cause	Troubleshooting
Pairing cannot be completed	The surroundings is very noisy, or the signal between the Monitor and the Gateway is too weak. Try pairing the device with antennas closer to each other or in less noisy environment.
The Monitor does not respond to the application of a magnet	Check the condition of the inserted batteries, replace if necessary.

11. WARRANTY

In addition to the statutory warranty, we provide a warranty in accordance with the following conditions:

• The warranty begins on the day of purchase. Warranty claims are recognized solely upon presentation of the receipt from the purchase of the product. Warranty repair is free, or we reserve the right to deliver similar equipment of the same value.

• The warranty is valid if used correctly according to the instructions for use. It expires if there are interventions by unauthorized persons and when using spare parts other than from the producer.

• All failures resulting from defects in materials or workmanship will be rectified at the discretion of the manufacturer either by repair or free replacement of the device.

• When delivering spare parts or providing repair, the warranty period of the original product is not extended.

• The duration of the warranty and the address of the warranty provider can be found in the enclosed user instructions for the given type of equipment.

• The warranty does not include accumulator batteries or batteries of any type, excessive damage due to overvoltage (including lightning) and damage due to battery acid spillage.

This device has a 3-year warranty period according to our warranty conditions!
Safety instructions, commissioning, battery care, warranty conditions and possible sources of faults can be found in the enclosed operating instructions!

Get insights with fencee Cloud

Control and monitor your fences from your mobile phone, tablet or computer.

THANKS TO THE REMOTE CONTROL,
YOU DON'T HAVE TO GO AROUND THE FENCES ANYMORE

WELL - ARRANGED GRAPHS

CURRENT INFO

ONLINE ALARMS

MAP BASE

LIST OF DEVICE

NO SIM CARD

VIRTUAL FENCE

ACCESS CONTROL

PHONE CONTROL

YouTube

Watch a video about the app fencee Cloud

SMART FARMING

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Free app download

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