

How does it work?

Xignal digital mouse and rat trap

Trapping rodents in a smart way with the most modern sensor technology of Xignal!
Monitoring and recording rodent activities take place 24/7. This creates room for intensive and efficient inspections. This saves costs. The non-tox digital trapping fits in with integrated pest management. Xignal is the solution for now and the future: Intelligent and sustainable pest control.



Detect

Xignal detects the status of the mouse and rat trap: armed, unarmed or unarmed with catch. Xignal also monitors the temperature and movement of the trap 24/7.



Send

Through the LoRa technology the communication runs via your private of public network. The end-to-end solution of Xignal, from sensor to online portal, is easy to use.



Report

By a push notification on your mobile or tablet you get online reports about rodent activities. So you can directly respond and control the activities of rodents.



Dimo Systems BV

Avelingen-West 11 PO Box 875 4200 AW Gorinchem The Netherlands phone +31 (0)183 745 909 email info@dimosystems.com detect → send → report www.xignal.com



Pricing

Basic

Free

- Max. 10 devices
- 1 user
- 1 location
- 1 address
- Push notifications

Floorplan

History

Data export (excel/csv)

Basic +

€10,-/month

✓ Max. 50 devices

- ✓ 2 users
- ✓ 5 locations
- ✓ 2 addresses
- Push notifications
- 🖌 Floorplan
- 1 week history

Advanced

€20,-/month

✓ Max. 100 devices

- ✓ 5 users
- ✓ 10 locations
- ✓ 5 addresses
- Push notifications
- ✓ Floorplan
- ✓ 1 month history

Data export (excel/csv)

Pro

€30,-/month

- ✓ Max. 200 devices
- ✓ 5+ users
- 10+ locations
- ✓ 5+ addresses
- Push notifications
- 🖌 Floorplan
 - Unlimited history
 - ✓ Data export (excel/csv)

Enterprise

Contact us

For custom solutions like an API connection with your current software.



Xignal user manual

The trap is received in a "deep sleep" state. This state turns off all normal functionality, in order to preserve battery life. To activate the trap, quickly press both buttons on the trap. The trap will now automatically try to register through the gateway. While the trap is waking up, the LED will turn on, showing different colors throughout the startup procedure (red to yellow to green). As soon as this has succeeded (after about 20 seconds), the trap will start its normal operation and the LED will turn off. In normal operation, the device collects hourly temperature data, and once a day, the trap will send an update to the server. In order to perform a range test (to see if the trap is able to communicate with the gateway), the back button can be pressed. As soon as this button is pressed, the LED will start blinking blue. After a short while (up to 8 seconds) the LED will change colour. If the colour is red, the trap was not able to establish a connection with the gateway, and if the colour is green, the trap was able to establish a connection.

The trap can also be put back in its original "deep sleep" state. This is done by holding both buttons for at least 7 seconds. If the LED turns on after releasing the buttons, please try the same procedure again, as the buttons were not pressed long enough. After releasing the buttons, it is advised to try the back button. If the ranging starts, the device didn't successfully enter deep sleep mode, and you should try the same steps again. If the LED remains off, the device successfully entered deep sleep mode and will preserve its battery.

In case of a malfunction, both buttons can be quickly pressed (press the buttons quickly, don't hold them for longer than 5 seconds or deep sleep will be activated). This performs a reset of the trap. The trap will once again try to register through the gateway and after coming out of the deep sleep mode, as shown by the LED, just as with the normal startup procedure (see above).

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Specsheet

Technical parameters

- LoRa Module
 - LoRaWAN™ Certified
- RN2483
- Temperature sensor
- LMT85DCKT
- $-\pm 0.4$ °C typical accuracy
- Accelerometer
 - MMA7660FCT
 - ± 1.5q, 3 axis
- LED RGB status LED
- MCU
 - ATMega 328P
 - 8MHz crystal
- Battery (2032 button cells)
 - Multicomp CR2032
- 3V
- 210mAh each
- Mousetrap: 2*210= 420mAh -> 3 years of battery life * at 25°C
- Rattrap: 3*210 = 630mAh -> 4 years of battery life * at 25°C
- Internal PCB Antenna
- 868MHz (Europe)
- 2 Microswitches
 - Sense trap state
 - Diagnostic test

Features

- LoRaWAN™ Certified
- Hourly temperature measurements
- Daily trap state updates (24 hours worth of temparature data, current battery level and trap status (opened/closed/catch))
- Instant update when trap is moved or after catching something
- Shake/move detection
- Low power/3 years of battery life * at 25°C
- Easy installation, works out of the box
- Ability to detect false-positive 'catches' (the trap snapped, but didn't catch anything)
- · Ability to perform diagnostic ranging tests
- Reset feature



Physical specifications - Mouse: 97.3 x 46.9 x 58 mm - Rat: 138.9 x 75.8 x 67 mm

- Mouse: 52g - Rat: 128g

• Weight

• Dimensions

- Battery: (rat 3x, mouse 2x) CR2032 batteries
- Antenna: Integrated
- Operating Temperature: 0 to 55°C
- LED: 1x RGB, integrated.
- Humidity: 10% to 90%



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