

ReX 2 Jeweller

Radio signal range extender supporting photo verification.



An Ajax hub is required for device operation. Find the detailed information on the device at the link:

<https://ajax.systems/support/devices/rex-2>



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GRADE
EN 50131

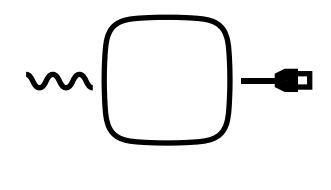
PD 6662
2017

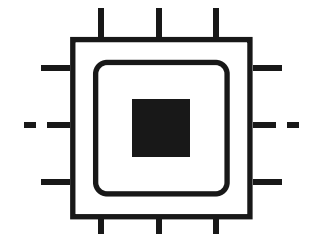
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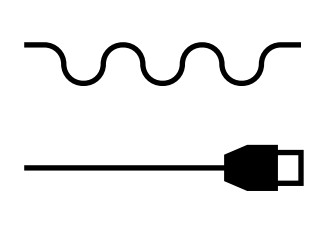
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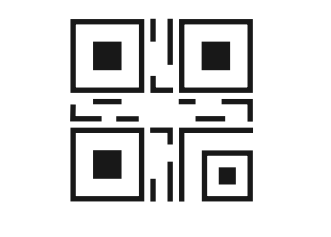
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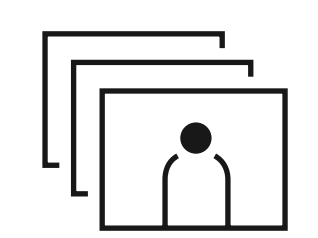
Key features

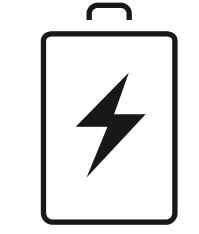
 Two channels to transmit events and photos from connected devices to the hub: Ethernet and radio

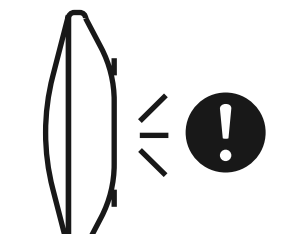
 Range extender firmware update over the air

 Radio frequency hopping and transmitting all data via Ethernet in case of attempted jamming

 Fast pairing with the security system using QR code

 Transmitting photos taken with the detectors of the MotionCam lineup

 Up to 38 hours of battery operation in case of a power outage

 Enclosure protected with the tamper

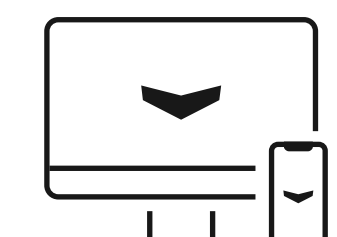
 Remote control and configuring via the Ajax apps

Photo verification for large and complex facilities

The maximum radio communication range with connected devices is 1,700 meters in an open space. Up to 5 range extenders can be connected to an Ajax security system, allowing it to protect large-scale objects. Regardless of the number of devices connected to the range extender, alarms are delivered in 0.3 seconds. The first photo taken with the detector of the MotionCam lineup is delivered in 10 seconds (the exact time depends on system parameters).

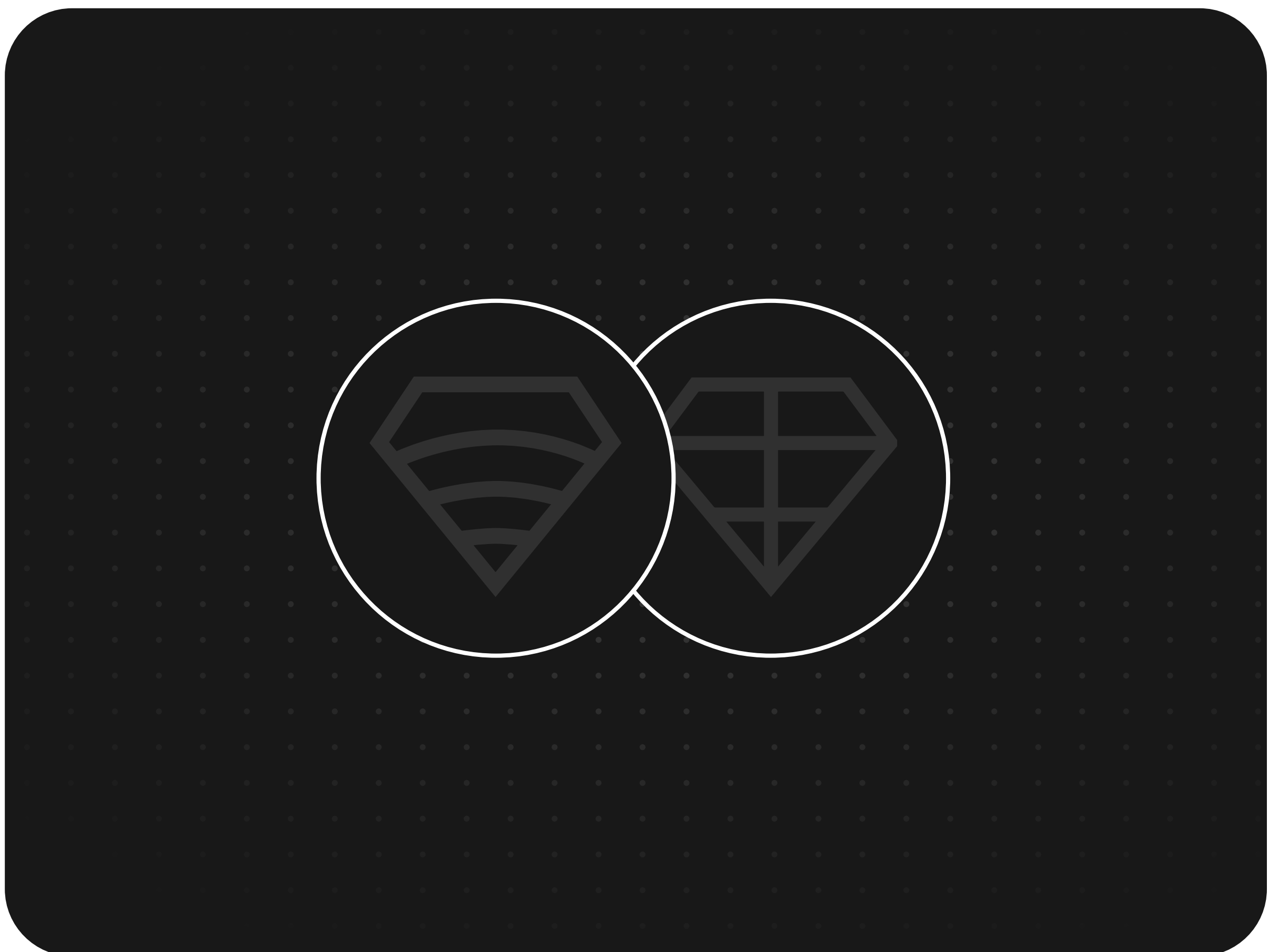


Guaranteed delivery of alarms and photos

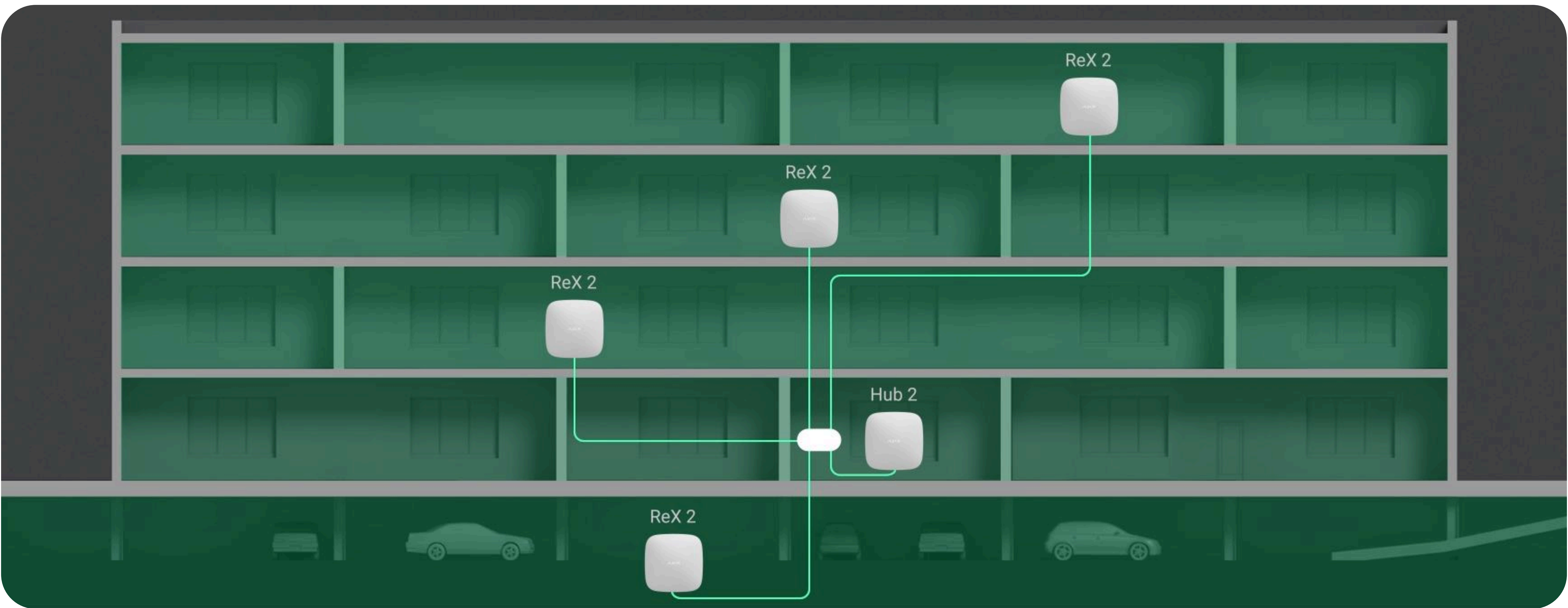
ReX 2 is equipped with four antennas and supports two radio protocols: **Jeweller** and **Wings**. The maximum radio communication range of each protocol is 1,700 meters in an open space.

Jeweller transmits commands, events and alarms. **Wings** provides packet transmission of images, even when the signal strength is unstable and the communication fails. This is possible due to the built-in algorithms for checking and uploading data packages.

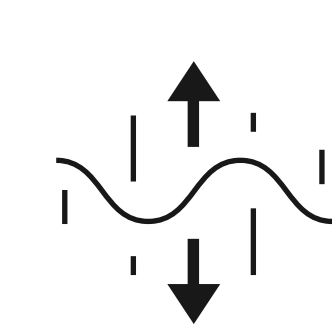
Ajax two-way radio communication uses frames to synchronize device communication sessions, authentication to prevent spoofing, and encryption to protect against data theft.

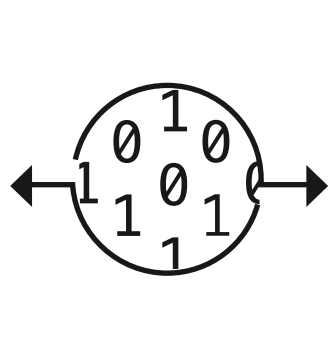


Communication through steel and concrete



ReX 2 with **OS Malevich 2.13** firmware transmits data to the hub via radio and Ethernet cable. The cable can be used as the only or additional communication channel. The hub and the range extender must be connected to the same network through a router for that. An Ajax security system does not limit the length of the cable. Thus, one system can cover such an object as an office center with underground parking, a metal sectional hangar or a warehouse complex of several buildings.

 Automatic switching between the channels in case of connection loss with one of them

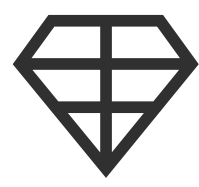
 Data transmission protected by encryption

Quick installation

Connecting and configuring ReX 2 is a hassle-free process which saves the installer time. To add the range extender to the system, scan the QR code using an Ajax app, then assign a name and a room to the device. And if necessary, the range extender can be turned off or reconfigured remotely, without visiting the facility.



Technical specifications

Compliance with standards		EN 50131 (Grade 2) PD 6662:2017 INCERT NFA2P UL1023, UL2610 ULC S304	Compatibility		Hubs Hub 2 (2G) Hub 2 (4G) Hub 2 Plus Hub Hybrid (2G) Hub Hybrid (4G) Devices All Ajax wireless devices Range extenders ReX 2 does not connect to other range extenders
Communication channels		 Jeweller communication technology  Wings communication technology Ethernet 8P8C socket Up to 100 Mb/s	Data transmission		Alarm delivery speed 0.3 s Photo delivery speed via Wings up to 18 s Depends on system parameters Photo delivery speed via Ethernet up to 10 s Depends on system parameters

Communication channels	Radio frequency bands 866.0–866.5 MHz 868.0–868.6 MHz 868.7–869.2 MHz 905.0–926.5 MHz 915.85–926.5 MHz 921.0–922.0 MHz Depends on the sales region Maximum effective radiated power (ERP) ≤ 20 mW Radio communication range up to 1,700 m In an open space Polling interval 12–300 s Adjusted by PRO or user with admin rights in the Ajax apps Protection against spoofing Device authentication Protection against jamming Radio frequency hopping Automatic switching the communication channel in case of connection loss	Power supply	Main power supply 100–240 V, 50/60 Hz Backup power supply Li-Ion with 2 A·h capacity Up to 38 hours when not connected via Ethernet Up to 12 hours when connected via Ethernet
Installation	Operating temperature range from -10°C to +40°C Operating humidity up to 75% Protection class IP20	Enclosure	Colour white, black Dimensions 163 × 163 × 36 mm Weight 410 g

Complete set	ReX 2 Jeweller SmartBracket mounting panel Power supply cable Screw terminal block Adapter* Ethernet cable Installation kit Quick start guide	Enclosure	Tamper alarm
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*Only for INCERT compliance.