The Most Awarded Wireless Security System in Europe

SECURITY & FIRE EXCELLENCE AWARDS 2017

securika mips

intersec Final

LES TROPHÉES EXPOPROTECTION 2018 ARGENT

Intruder Alarm of the Year

The Best Innovative Product

Innovative Security Product of the Year

Security & Firefighting Risks

AJAX

Professional Wireless Security

Ajax protects your family and business from burglars, fires, and leakages. If trouble comes, the system immediately activates sirens, notifies users, and requests help from an alarm response company.

- Spotting intrusion

- Preventing fire

- Detecting flooding

- Verifying alarms with photos

- Supporting security cameras

- Executing automation scenarios

Motion detected, MotionCam in Hall
20:35   1 / 3
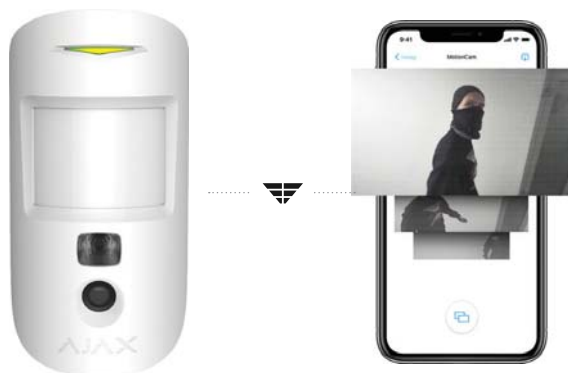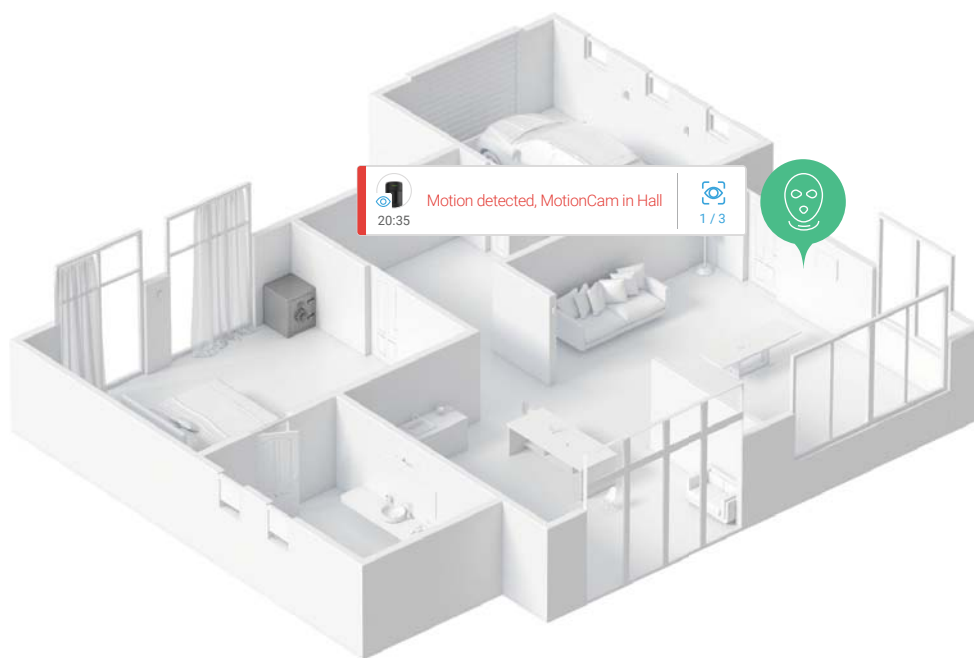
Visual Alarm Verification

MotionCam detectors accelerate the process of confirming alarms. The moment someone enters a secured area, the detector makes a series of photos. Ajax delivers the first snapshot within 9 seconds following the motion alarm. To ensure privacy, MotionCam activates its camera only when triggered.

Home Automation

With scenarios, Ajax resists threats and manages home appliances automatically. A real-time OS Malevich is responsible for the uninterrupted execution of commands. So if the central panel loses the connection with Ajax Cloud, the security system still follows pre-set instructions.

- Schedule arming/disarming/Night mode

- Configure automatic flood and fire prevention systems

- Use motion alarm to switch on outdoor illumination in case of trespassing

- Create scenarios for appliances

Water

LeaksProtect

Relay

Solenoid valve
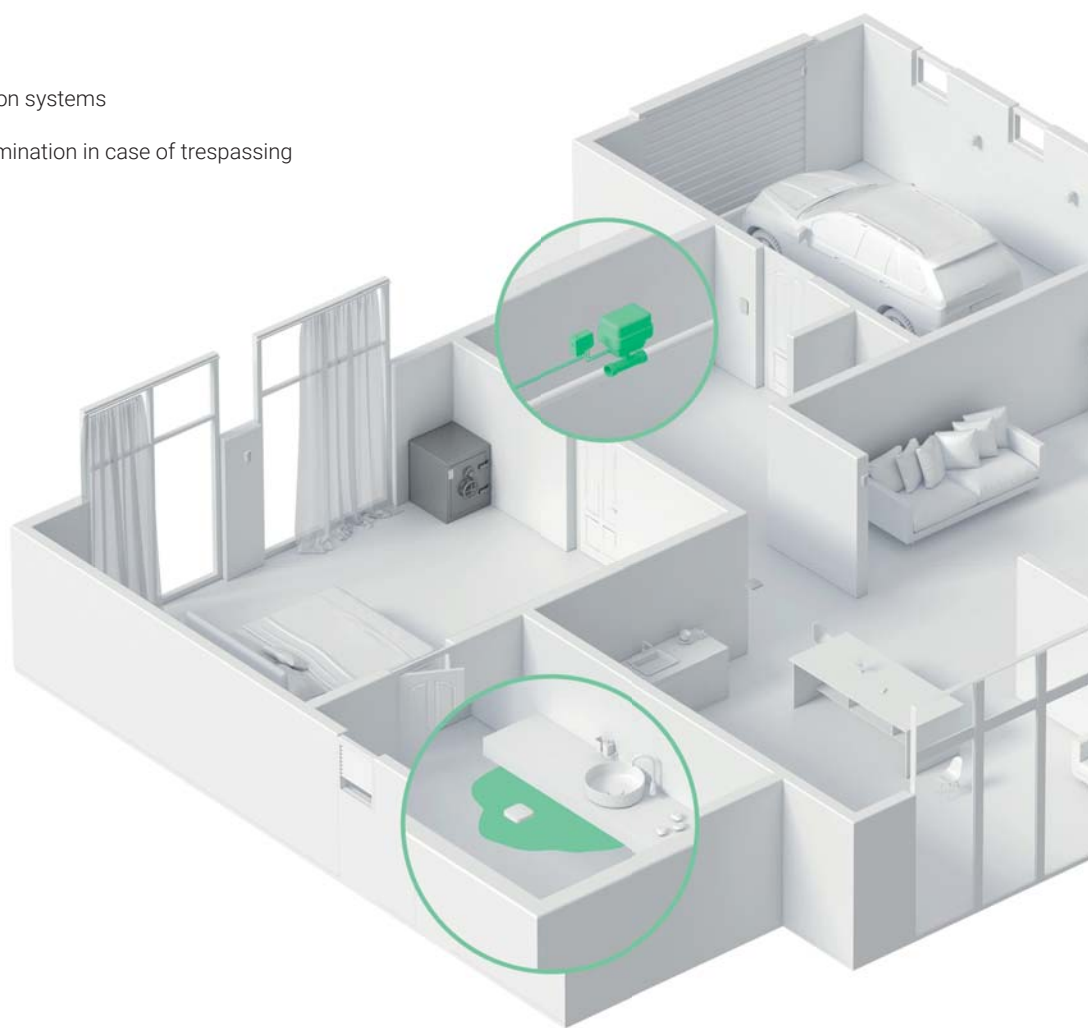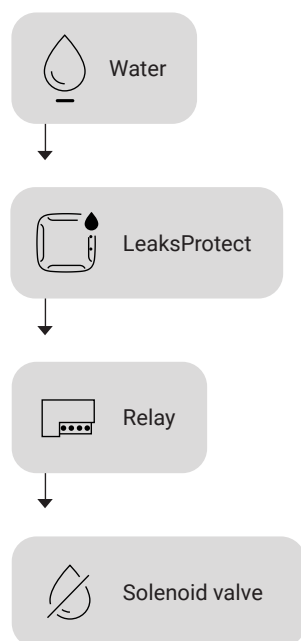
Unique Communication Technologies

Jeweller

Jeweller is our proprietary radio technology engineered for advanced protection of residential and commercial properties. The technology enables two-way communication with system devices for remote configuring and instant alarm transmission. Transmitted data is encrypted using a block cipher with a dynamic key. Ajax detects jamming and notifies users as well as an alarm response company about difficulties.

- Up to 2,000 m wireless communication range
- Alarm delivery in 0.15 s
- Two-way radio communication
- Minimum device polling interval: 12 s
- 868.0–868.6 MHz operating frequency band
- Up to 7 years of detector battery life

Wings

Wings is a high-speed radio protocol for data transmission. It allows MotionCam detectors to send visual alarm verifications to the hub at a distance of up to 1,700 meters. Security companies and users can see the first snapshot in 9 seconds after motion is detected. Wings' energy efficiency allows MotionCam detectors to operate up to 4 years on the pre-installed batteries.

- Transmission of images parallel to the alarms
- First photo delivered in less than 9 s
- Photo series for detailed situation appraisal
- Up to 640×480 px image resolution

Security of Any Scale

One facility means one security system. To make this statement true for massive-scale productions, warehouse complexes, and multi-story business centers, we've developed ReX: a radio signal range extender. ReX doubles the Jeweller communication range, boosting the coverage of one hub up to 16 km². Hub 2 and Hub Plus central panels support five range extenders in one system, covering up to 35 km².
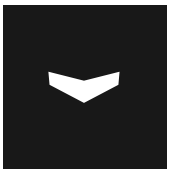

Hub / Hub 2 / Hub Plus	up to **12** km²
Hub + Rex	up to **16** km²
Hub 2 / Hub Plus + 5 ReX	up to **35** km²
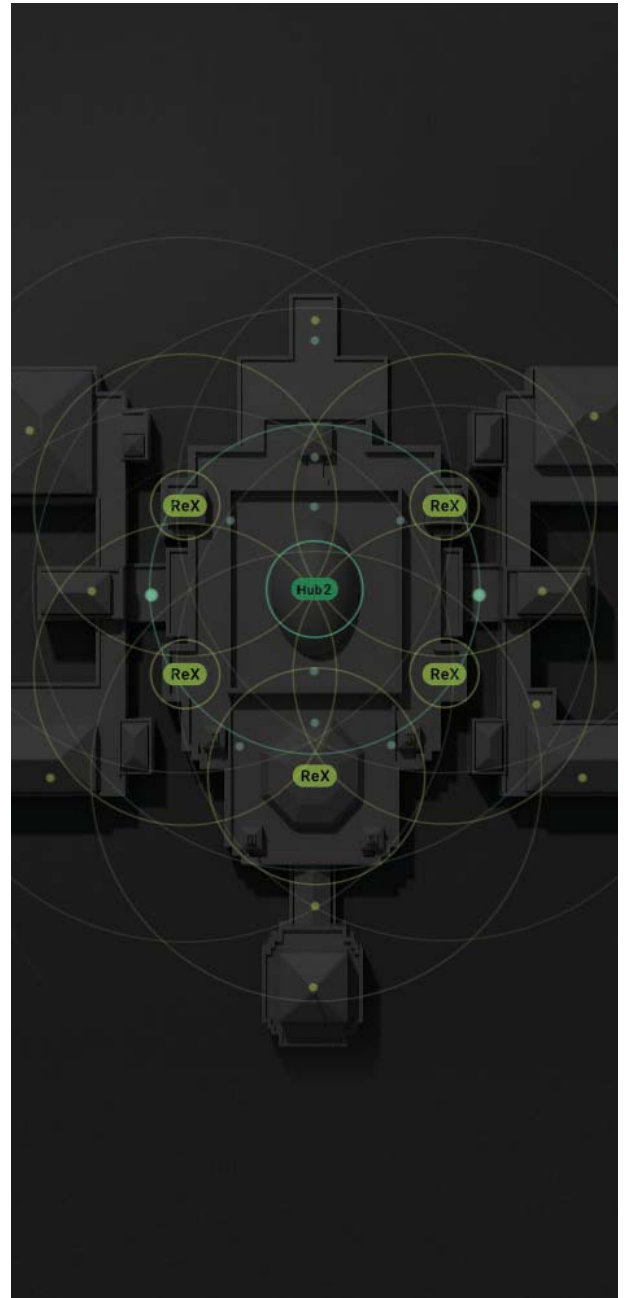
OS Malevich

Ajax operates on a real-time operating system, which ensures flawless execution of every command. Such operating systems are used in robotics, aviation, and military — in every field with no place for mistake.

OS Malevich is named after Kazimir Malevich, an avant-garde artist whose concept of Suprematism brought basic geometrical forms to the form of pure art. This approach inspired us to develop the perfect and straightforward software with broad potential for improvements.

Running in every Ajax control panel, OS Malevich controls devices and communicates with the cloud server over several channels. Its modular architecture enables to expand system possibilities with over-the-air updates automatically and regularly. OS Malevich communicates with users via push-notifications, SMS, and calls, delivering alarms, notifying of events, or sending pictures from motion detectors. Designed as an independent software solution, OS Malevich has no breach for cyber-attacks.

Protected from cyber-attacks

Constantly monitors each device

Improves the Ajax system with each update

Updates automatically over the air

Anti-Sabotage

Your security system can't be destroyed without your awareness: Ajax notifies of device malfunctions or connection failures and maintains a log of system events. Foreseeing that our system can face serious threats, we've implemented backup systems. And backups for these backups. During a blackout, the hub will stay on its mission powered by a back-up battery. In case of radio signal interference, the hub switches the back-up frequency and notifies users and an alarm response company. If Ethernet cable has been cut off, our hubs can automatically switch to GSM/UMTS (2G/3G). One hub can have up to 4 communication channels.

No worries about

Blackout

All detectors operate on batteries. In the case of a blackout, the hub reports a power failure and continues to operate using the backup battery

Radio Channel Jamming

System notifies ARC and users and switches the frequency
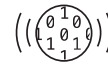
Hacking Attempts

Ajax encrypts all transmitted data using block cipher with a dynamic key and authenticates devices during each interaction

Internet Issues

If Ethernet or Wi-Fi fails, the hub uses GSM/UMTS channels to remain online

Server Connection Loss

Ajax Cloud detects when hub goes offline and notifies ARC and users

Tampering

An alarm is triggered if someone dismounts the device

Detector Failure

Hub monitors each device and sends an immediate alert in case of failure

Ajax Cloud

Our cloud server provides the possibility to manage and configure security systems from any point in the world.

Ajax Cloud is an always-on-duty focal point for hubs, security companies, and users. Processing alarms instantly, it provides a reliable platform for transferring updates and back-up communication with central monitoring stations.

Ajax Cloud

Internet

Backup communication channel

Internet

GSM (SMS, call)

Internet

Smartphone

Jeweller

Security company

Ajax device
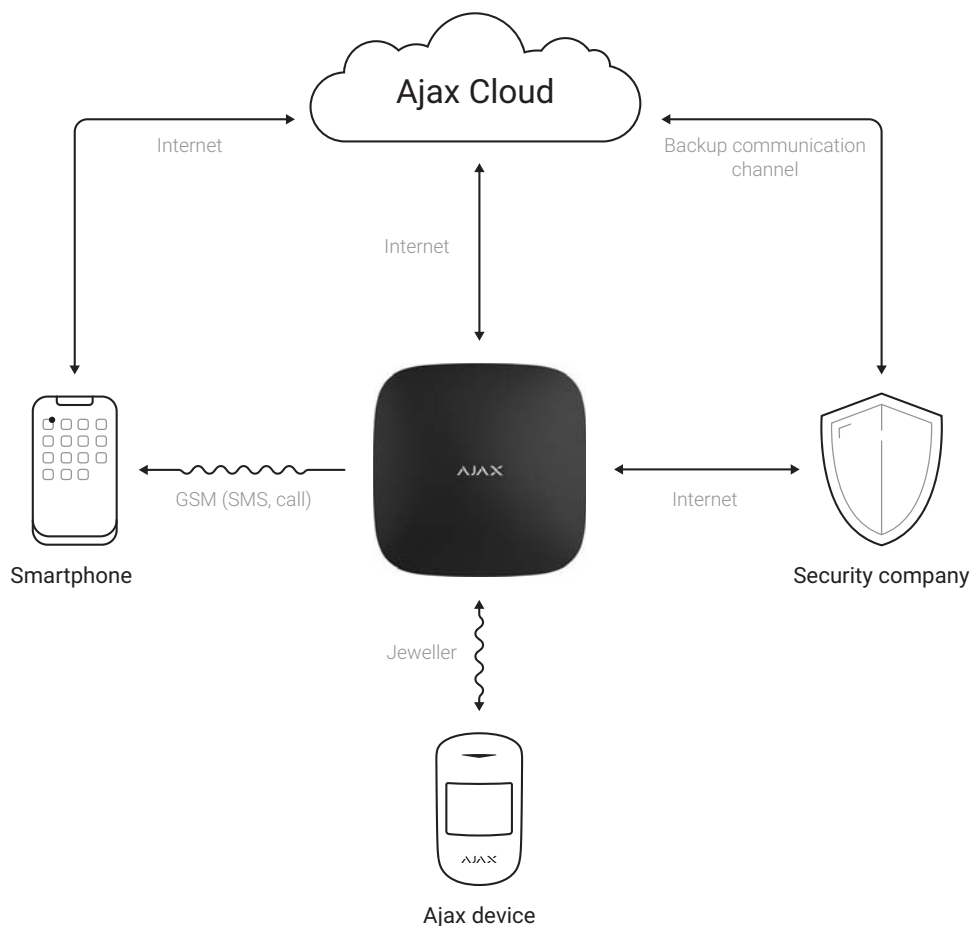
Features

- Real-time remote management
- Detailed status of devices
- High-load endurance
- Automatic software updates

Video Surveillance

With Ajax, you won't have to split the protection: combine security system management and video surveillance in one app. Connect Dahua, Hikvision, Safire or Uniview cameras and DVRs in minutes using quick integrations. Or connect any other IP-camera via RTSP.

- Stream video and sound

- Save snapshots

- Zoom video in

- Connect single cameras or DVRs with hundreds of connected cameras

Seamless Setup

We've made the installation process as simple as possible. Our devices come with pre-installed batteries and ready to operate from the box. Pair them with the hub using a QR-code and mount on SmartBracket. Our apps help installers to test signal strength and detection zones on-site, as well as reconfigure devices remotely.
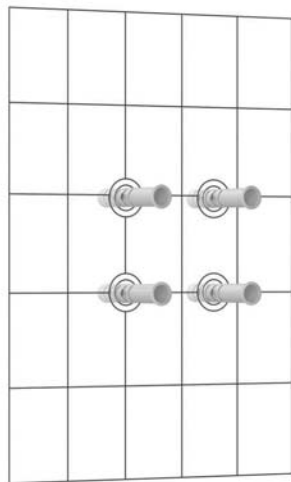
SmartBracket

Screws

Wall
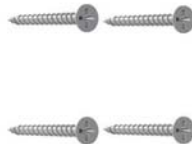
Device

- In-app wizard for pairing

- No need to disassemble devices

- Remote testing and device configuring

Scan
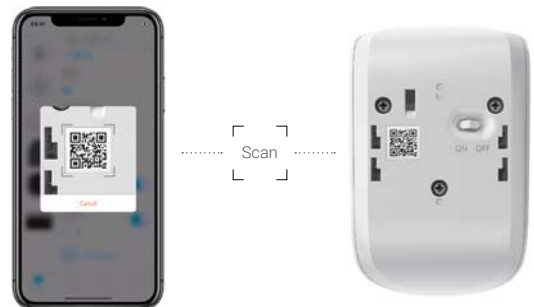
App for End Users
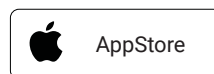
Ajax Security System app is designed to help users to stay in touch with their property from anywhere in the world.

Easy to Use

Arm/disarm the system

Schedule security

Get instant notifications

Create scenarios

Manage users

Control smart home

Follow the log of events

Watch security cameras

Secure in Every Way

Sessions management

Two-factor authentication support
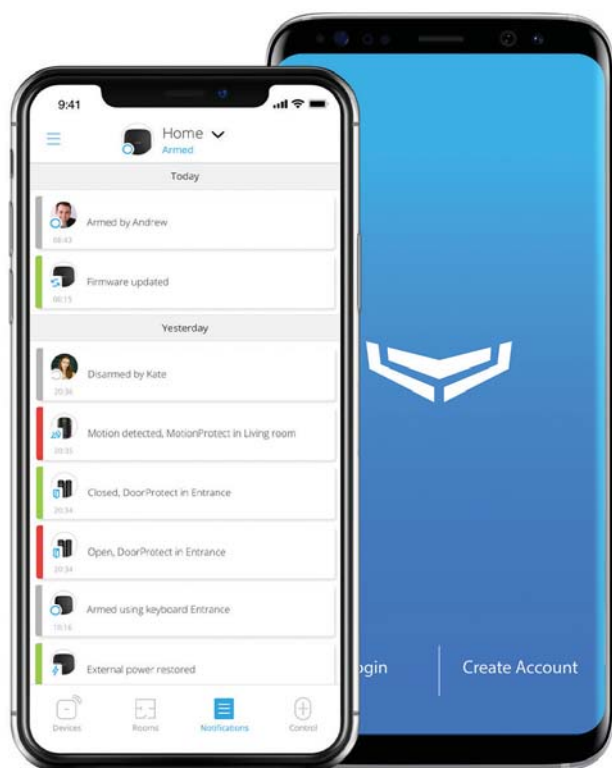
Apps for PROs

With Ajax PRO apps, teams have everything to administer, configure and monitor alarms of an unlimited amount of hubs. At the office, in the field, and on the go. All accounts are constantly in sync.

Set alarm monitoring stations

Coordinate the work of a team

Swiftly verify alarms with photos from MotionCam detectors

Create new security objects and connect equipment

Test communication and detectors

Add/remove users and manage their access to settings

Search and filter the log of events

Connect video cameras and DVRs

Create arming/disarming schedules for the whole system or selected groups of devices

Configure alarm reactions for automation devices

Configure the alarm confirmation algorithm

Ajax PRO

All-in-one desktop application for administering security systems and advanced alarm monitoring.

macOS	Windows
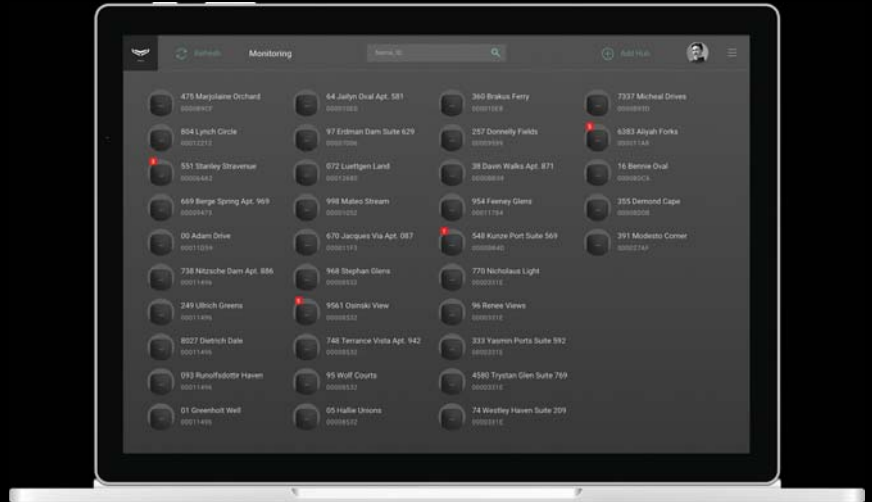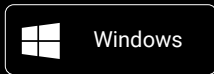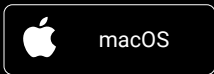
Ajax PRO: Tool for Engineers

Mobile application for administering of security systems on the fly.

| AppStore	Google Play
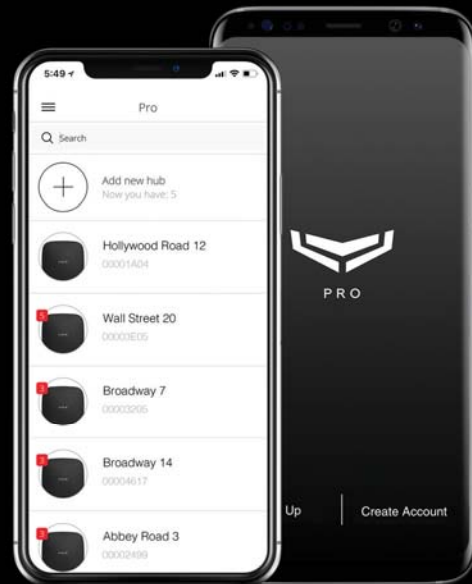
Connecting Monitoring

Over 1,200 alarm response companies around the world are processing Ajax security system alerts. And this number constantly grows. The system can be connected to most of the central monitoring stations (CMS) directly or/and via Ajax Cloud.

- SIA and Sur-Gard (Contact ID) support

- Direct connection or/and via Ajax Cloud

- Confirmed alarms

- Delivery of photo confirmations of the MotionCam alarm signals to Manitou or SBN CMS software

Enterprise API
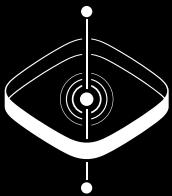
An interface for Ajax integration into third-party apps and services.

Using our API, security and service companies can control Ajax security systems through their services or applications and configure the interaction of our devices with third-party equipment.

Administer security systems using third-party software

Build integrated security services and automation solutions based on our products

Integrate Ajax into an existing IT infrastructure, billing and CRM systems

Products

Control panels   Indoor security   Outdoor security   Fire prevention   Flood prevention   Sirens

Automation   Controls   Integrations

Hubs

Intelligent control panels

The hub manages all devices within the security system. It notifies users and an alarm response company about any threats instantly. The use of two-way communication allows hubs to send alarm signals, configure devices remotely, and constantly monitor the system's state.

For more information visit the product pages at www.ajax.systems/products

Hub 2	Hub Plus	Hub
2G & Ethernet	Wi-Fi, 3G, 2G & Ethernet	2G & Ethernet
Dual SIM	Dual SIM	1 SIM
100 devices	150 devices	100 devices
25 cameras	50 cameras	10 cameras
50 users	99 users	50 users
9 groups	25 groups	9 groups
up to 16 hours of battery life	up to 16 hours of battery life	up to 15 hours of battery life
Visual alarm verification support	No visual alarm verification support	No visual alarm verification support

Bulletproof Protection

Real-time operating system OS Malevich

Tampering alarm

External power failure alarm or notification

Up to 16 hours of operation on the back-up batteries

Customizable ping interval: 12–300 s

Data encryption

Multi-channel communication

Resistance to cyber-attacks

Effortless Operation

Instant alarm delivery even with slow Internet connection

Two-way radio communication for testing and configuring of the connected devices

New security and automation features with automatic over the air OS updates

Multiple ways to control the system and connected devices: mobile and desktop apps, key fobs, keypads, smart buttons

Scenarios (reactions and schedules) for security and home automation

Simple Installation

1. Connect devices to the hub with the mobile app

2. Use the SmartBracket to mount the hub without disassembling it

3. Open the app to configure hub's settings

Tech Specs

- Color: white/black

- Installation: indoors

- Radio communication range: up to 2,000 m

- Alarm delivery speed: 0.15 sec

- Alarm notification types: SMS,
  call, push-notification

- CMS connectivity: SIA, Sur-Gard (Contact ID)

- Power supply: 110–240 V AC (12 V power
  supply unit is available on demand)

- Battery backup: Li-Ion 2 A·h
  Up to 16 hours of operation

- Operating temperature range:
  from -10°C to +40°C

- Permissible humidity: up to 75%

- Dimensions: 163×163×36 mm

- Weight
  Hub/Hub Plus: 350 g
  Hub 2: 362 g

Engineering Masterpiece

- Hubs are only 4 cm thick

- No excess modules or buttons

- Built-in backup battery

- Built-in dual path communicators