

Ajax Superior Hub G3 Jeweller

Wireless control panel with support for photo verification. Connectable via Ethernet, Wi-Fi, and two SIM cards (2G/LTE).

This is a device of the Superior product line. Only accredited Ajax Systems partners can sell, install, and maintain Superior products.



SUPERIOR





High security for high stakes. Now wireless.

Ajax Superior Hub G3 Jeweller is the core of the world's first wireless Grade 3 security system. The control panel connects to Ajax devices using proprietary Superior Jeweller and TurboWings protocols. They provide stable, encrypted communication over up to 3,500 m (11,450 ft) (TBC). The hub supports Ethernet, Wi-Fi, and 2G/4G(LTE) SIM cards, switching in case of interruptions to always stay online. Hot-swappable backup batteries keep the system running for up to 16 or 60 hours after a power outage. All this creates a strong foundation for the unified Ajax ecosystem — combining intrusion protection, fire and life safety, video surveillance, and comfort and automation.

Built to stand out



One system for every need: fire safety, intrusion protection, video surveillance, and comfort and automation



Mobile and desktop Ajax apps for security professionals and end users for all-in-one system control



Hassle-free installation and setup with all communicators and a power supply unit built in — no enclosure disassembly or additional hardware required



Industry-leading sabotage protection, tested by independent laboratories for compliance with international and local security standards

Grade 3 protection for small and medium-sized sites



Up to 250 devices



Up to 200 users



((' † ')) Up to 5 range extenders





and 492 Ajax cameras



Up to 64 automation scenarios



The hub can use ExternalAntenna² to improve signal strength in Superior Jeweller, Jeweller, TurboWings, Wings, and cellular channels.

Reliable communication out of the box

Hub – devices

Superior Jeweller and Jeweller protocols for secure wireless communication with connected devices.

TurboWings and Wings protocols for photo transmission and over-the-air updates.

VoRF protocol for full-duplex audio communication between site and monitoring station.



Ethernet, Wi-Fi, and two 2G/4G (LTE) SIM cards to access the internet.

Instant automatic switch between channels in case of interruptions.

Support for up to four providers simultaneously.

Notification of communication loss via any available channel.

Hub – monitoring companies

Over ten supported protocols, including SIA and SurGard.

Signaling levels up to DP4 supported.

Three communication options: direct connection, via Ajax Cloud, or via both channels.

Adjustable polling intervals for connection to monitoring companies starting from 10 seconds.

Hassle-free connection to third-party monitoring software within minutes.







Superior Jeweller and TurboWings communication technologies

- Up to 3,500 m (11,450 ft) (TBC) of radio communication with connected devices in open space
- Enhanced encryption throughout data transmission between the hub and connected devices
- Regular polling to display the current state of the hub and connected devices
- Fast photo transmission from Ajax motion detectors



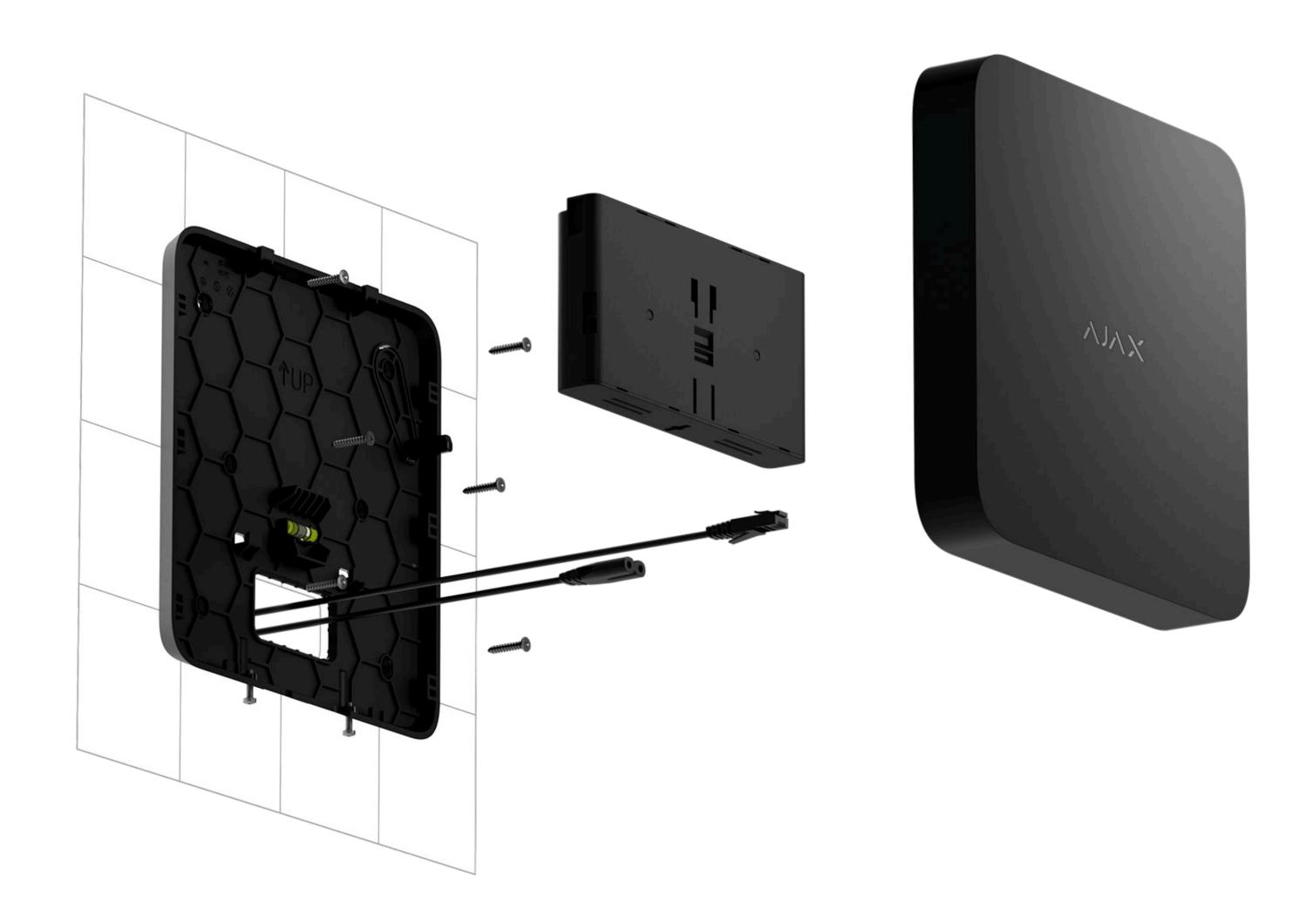
Sabotage protection

- Tamper button to detect dismantling or detachment
- Authentication of the hub and connected devices to prevent spoofing
- Detection of communication loss³ between the hub and Ajax devices, Ajax Cloud, and monitoring station
- Frequency hopping to prevent radio interference and jamming
- Jamming detection and notification
- Backup power¹ for uninterrupted system operation for 16 or 60 h after an outage



Hassle-free installation and setup

- Adding to a space via QR code
- Installation without enclosure disassembly with all communicators and a power supply unit built in
- Setup in minutes via an Ajax app no programming required
- Quick connection to third-party monitoring software and up to DP4 signaling configuration
- Battery¹ hot swapping
- Instant malfunction and maintenance notifications
- Remote control and configuration of parameters and permissions in mobile and desktop apps



Compliance with standards

EN 50131 (Grade 3) PD 6662:2017

Compatibility with Ajax devices

For detailed information, scan the QR code or follow the link:



<u>ajax.systems/tools/</u> <u>devices-compatibility/</u>

Complete set

Ajax Superior Hub G3 Jeweller
SmartBracket mounting panel
Power cable
Ethernet cable
Installation kit
SIM card (depends on the sales region)
Quick start guide

Communication with Ajax devices

Superior Jeweller⁴ communication technology

TurboWings⁵ communication technology

Communication range up to 3,500 m up to 11,450 ft

In open space

Frequency bands

865.0-868.0 MHz 868.0-868.6 MHz

868.7-869.2 MHz

869.4-869.65 MHz

The device supports all listed bands

Polling interval

12-300 s

Adjusted by a PRO or user with admin rights via Ajax apps

Photo alarm verification

Enhanced photo delivery speed of up to 4.5 (TBC) seconds with the TurboWings protocol

Communication channels

Ethernet

8P8C socket

Up to 100 Mbps

Cellular

2 slots for micro SIM

- 2G GSM900/DCS1800 (B3/B8)
- 4G (LTE) FDD B1/B3/B5/B7/ B8/B20

Wi-Fi

802.11 b/g/n module Up to 600 Mbps

Automatic switching between communication channels

Communication channel prioritization

- 1. Ethernet
- 2. Wi-Fi
- 3. Cellular connection

Communication channels work in parallel for increased system reliability, with Ethernet handling most data.

Capacity

Ajax devices up to 250

Ajax NVRs up to 36

Ajax cameras

up to 224 via Ajax NVRs and up to 492 standalone

Third-party IP cameras

up to 10 when using RTSP via SDK

up to 224 when using ONVIF via Ajax NVRs

Users

up to 200

Security groups up to 25

Automation scenarios up to 64

User authorization

Contactless access

Pass cards and Tag key fobs

(up to 200 devices)

Access codes

up to 200 personal codes for registered users up to 200 codes for unregistered users

Duress codes

up to 200 personal duress codes

Power supply

Main power supply 110-240 V, 50/60 Hz

Backup power supply

Provided by Ajax Superior Internal Battery (16h) or Ajax Superior Internal Battery (60h).

The batteries are sold separately.

Autonomous operation from 16 to 60 h

Depends on the battery model.
The batteries are sold separately.

Installation

Operating temperature range

from -10 °C to +40 °C from 14 °F to 104 °F

Operating humidity

up to 75%

Protection class IP30, IK06

Enclosure

Color

white, black

Dimensions

216 × 216 × 45 mm 8.50" × 8.50" × 1.77"

Weight

1,200 g 2.65 lb

- ² ExternalAntenna is sold separately.
- ³ The system detects communication loss between the hub and Ajax devices within 36 seconds if the polling interval is set to send three data packets as often as every 12 seconds.
- ⁴ The Superior Jeweller protocol is used only when all connected devices support it. Otherwise, the system operates via Jeweller.
- ⁵ The TurboWings protocol is used for devices that support it. Otherwise, the system communicates with those devices via Wings.













For detailed information, scan the QR code or follow the link:

¹ Backup Ajax batteries are sold separately. Only compatible batteries can be used: Ajax Superior Internal Battery (16h) or Ajax Superior Internal Battery (60h).