

## 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.



### 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<sup>1</sup> 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



Up to 25 security groups



Up to 36 Ajax NVRs and 492 Ajax cameras



Up to 64 automation scenarios



The hub can use ExternalAntenna<sup>2</sup> 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.



### Hub – Ajax Cloud and apps

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

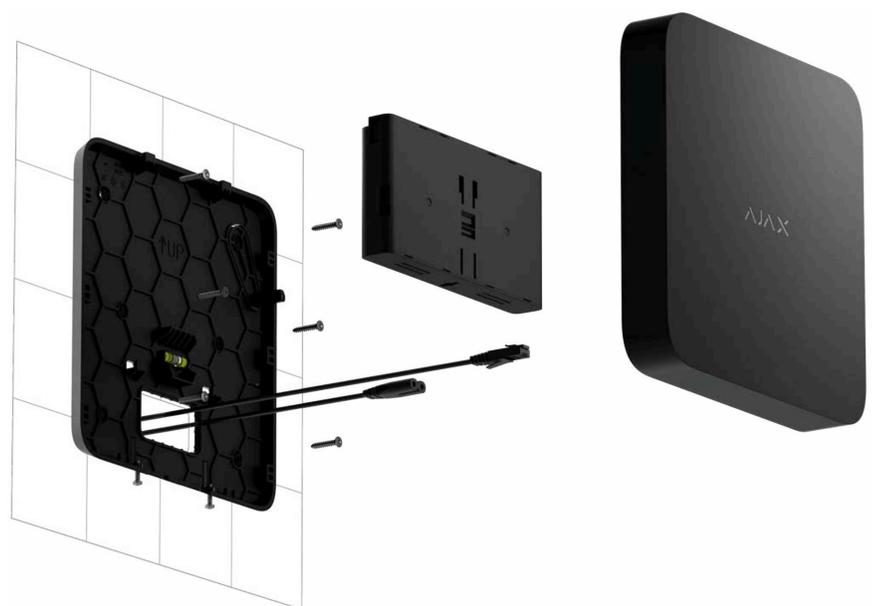
- Up to 3,500 m (11,450 ft) (TBC) of radio communication with connected devices in open space
- Enhanced encryption throughout data transmission between the hub and connected devices
- Regular polling to display the current state of the hub and connected devices
- Fast photo transmission from Ajax motion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

## Sabotage protection

- Tamper button to detect dismantling or detachment
- Authentication of the hub and connected devices to prevent spoofing
- Detection of communication loss<sup>3</sup> between the hub and Ajax devices, Ajax Cloud, and monitoring station
- Frequency hopping to prevent radio interference and jamming
- Jamming detection and notification
- Backup power<sup>1</sup> 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
- Battery<sup>1</sup> hot swapping
- Instant malfunction and maintenance notifications
- Remote control and configuration of parameters and permissions in mobile and desktop apps



<p><b>Compliance with standards</b></p> <p>EN 50131 (Grade 3) PD 6662:2017</p>	<p><b>Communication with Ajax devices</b></p> <p>Superior Jeweller<sup>4</sup> communication technology</p>	<p><b>Communication channels</b></p> <p><b>Ethernet</b> 8P8C socket Up to 100 Mbps</p>	<p><b>Capacity</b></p> <p>Ajax devices up to 250</p>
<p><b>Compatibility with Ajax devices</b></p> <p>For detailed information, scan the QR code or follow the link:</p>  <p><a href="https://ajax.systems/tools/devices-compatibility/">ajax.systems/tools/devices-compatibility/</a></p>	<p>TurboWings<sup>5</sup> communication technology</p> <p><b>Communication range</b> up to 3,500 m up to 11,450 ft In open space</p> <p><b>Frequency bands</b> 865.0–868.0 MHz 868.0–868.6 MHz 868.7–869.2 MHz 869.4–869.65 MHz</p> <p>The device supports all listed bands</p> <p><b>Polling interval</b> 12–300 s Adjusted by a PRO or user with admin rights via Ajax apps</p> <p><b>Photo alarm verification</b> Enhanced photo delivery speed of up to 4.5 (TBC) seconds with the TurboWings protocol</p>	<p><b>Cellular</b> 2 slots for micro SIM</p> <ul style="list-style-type: none"> <li>• 2G GSM900/DCS1800 (B3/B8)</li> <li>• 4G (LTE) FDD B1/B3/B5/B7/B8/B20</li> </ul> <p><b>Wi-Fi</b> 802.11 b/g/n module Up to 600 Mbps</p> <p><b>Automatic switching between communication channels</b></p> <p><b>Communication channel prioritization</b></p> <ol style="list-style-type: none"> <li>1. Ethernet</li> <li>2. Wi-Fi</li> <li>3. Cellular connection</li> </ol> <p>Communication channels work in parallel for increased system reliability, with Ethernet handling most data.</p>	<p>Ajax NVRs up to 36</p> <p>Ajax cameras up to 224 via Ajax NVRs and up to 492 standalone</p> <p><b>Third-party IP cameras</b> up to 10 when using RTSP via SDK up to 224 when using ONVIF via Ajax NVRs</p> <p><b>Users</b> up to 200</p> <p><b>Security groups</b> up to 25</p> <p><b>Automation scenarios</b> up to 64</p>
<p><b>Complete set</b></p> <p>Ajax Superior Hub G3 Jeweller SmartBracket mounting panel Power cable Ethernet cable Installation kit SIM card (depends on the sales region) Quick start guide</p>	<p><b>Power supply</b></p> <p><b>Main power supply</b> 110–240 V, 50/60 Hz</p> <p><b>Backup power supply</b> Provided by Ajax Superior Internal Battery (16h) or Ajax Superior Internal Battery (60h). The batteries are sold separately.</p> <p><b>Autonomous operation</b> from 16 to 60 h Depends on the battery model. The batteries are sold separately.</p>	<p><b>Installation</b></p> <p><b>Operating temperature range</b> from –10 °C to +40 °C from 14 °F to 104 °F</p> <p><b>Operating humidity</b> up to 75%</p> <p><b>Protection class</b> IP30, IK06</p>	<p><b>Enclosure</b></p> <p><b>Color</b> white, black</p> <p><b>Dimensions</b> 216 × 216 × 45 mm 8.50" × 8.50" × 1.77"</p> <p><b>Weight</b> 1,200 g 2.65 lb</p>
<p><b>User authorization</b></p> <p><b>Contactless access</b> Pass cards and Tag key fobs (up to 200 devices)</p> <p><b>Access codes</b> up to 200 personal codes for registered users up to 200 codes for unregistered users</p> <p><b>Duress codes</b> up to 200 personal duress codes</p>	<p><b>Power supply</b></p> <p><b>Main power supply</b> 110–240 V, 50/60 Hz</p> <p><b>Backup power supply</b> Provided by Ajax Superior Internal Battery (16h) or Ajax Superior Internal Battery (60h). The batteries are sold separately.</p> <p><b>Autonomous operation</b> from 16 to 60 h Depends on the battery model. The batteries are sold separately.</p>	<p><b>Installation</b></p> <p><b>Operating temperature range</b> from –10 °C to +40 °C from 14 °F to 104 °F</p> <p><b>Operating humidity</b> up to 75%</p> <p><b>Protection class</b> IP30, IK06</p>	<p><b>Enclosure</b></p> <p><b>Color</b> white, black</p> <p><b>Dimensions</b> 216 × 216 × 45 mm 8.50" × 8.50" × 1.77"</p> <p><b>Weight</b> 1,200 g 2.65 lb</p>

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

<sup>2</sup> ExternalAntenna is sold separately.

<sup>3</sup> 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.

<sup>4</sup> The Superior Jeweller protocol is used only when all connected devices support it. Otherwise, the system operates via Jeweller.

<sup>5</sup> 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:  
[ajax.systems/support/devices/superior-hub-g3-jeweller](https://ajax.systems/support/devices/superior-hub-g3-jeweller)

✉ support@ajax.systems  
📧 @AjaxSystemsSupport\_Bot  
🌐 ajax.systems