Hub Hybrid (2G) / (4G)

Hybrid security system control panel

Capacity	**Ajax devices** up to 100 ◇ Wired and wireless devices in any proportion. ◇ 5 range extenders max. ◇ 10 sirens max. **Cameras or DVRs** up to 25 ◇ RTSP support. ◇ Seamless integration with the Dahua, Hikvision, Safire, EZVIZ, Uniview IP cameras and DVRs. **Users** up to 50 ◇ Any number of admin users within the limit. ◇ PRO accounts for installers and monitoring companies. ◇ Access management for regular users. **Automation scenarios** up to 32 ◇ Alarm reactions. ◇ Scheduled actions. ◇ Security mode changing reactions. ◇ Temperature changing reactions. ◇ Humidity changing reactions. ◇ Reactions to changes in CO_2 concentration. ◇ Reactions to pressing the Button. **Security groups** up to 9 **Rooms** up to 50
Wired communication	**Fibra communication technology** Proprietary wired communication technology. Fibra combines the reliability of wires with the freedom of radio connection. It features: ◇ Two-way communication. ◇ Advanced anti-sabotage. ◇ Instant notifications.

	◇ Remote configuration via the Ajax apps. **Compatible wire** 4−core cable Bus connection. **Input** 8 bus lines Compatible with Fibra devices only. **Bus line length** up to 2,000 m / 6,500 ft When using the U/UTP cat.5 twisted pair. **Calculate the line length at the facility** **Power supply of devices** up to 14.4 W For all connected wired devices. **Calculate the power supply of devices** **Topologies** ◇ Star ◇ Ring In the line breakage event, the ring splits into two working segments, the devices continue to operate, and the system notifies a security company and users about the incident. Upcoming OS Malevich updates will provide the ring topology support. **Devices polling interval** from 12 to 300 s Adjusted by PRO or user with admin rights in the Ajax app.
Wireless communication	**Jeweller communication technology** Proprietary wireless communication technology to transmit alarms and events. It features: ◇ Two-way communication. ◇ Advanced anti-sabotage. ◇ Block encryption featuring a dynamic key. ◇ Instant notifications.

	◇ Remote configuration via the Ajax apps.

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 region of sales.

Maximum effective radiated power (ERP)
up to 20 mW
Featured automatic power control to reduce power consumption and noise interference.

Radio signal modulation GFSK

Radio signal range
up to 2,000 m / 6,500 ft
Between the hub and connected devices (in an open space). Maximum range depends on the connected device.

Calculate radio signal range at the facility

Polling interval
from 12 to 300 s
Adjusted by PRO or user with admin rights in the Ajax app.

Encrypted communication
All the data stored and transmitted are protected by block encryption with a dynamic key.

Radio frequency hopping

Wings communication technology
Proprietary wireless communication technology to transmit photo verifications.
It features:
◇ Two-way communication.
◇ Block encryption featuring a dynamic key.
◇ Advanced anti-sabotage.
◇ Package re-uploading in case of transmission errors.
◇ Photo delivery check. |

	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 region of sales. **Radio signal range** up to 1,700 m/5,600 ft Between the hub and connected devices (in an open space). Maximum range depends on the connected device. **Calculate radio signal range at the facility** **Radio frequency hopping** Radio communication uses frequency hopping to prevent interception and jamming.
Communication channels	**Ethernet** 1 × 8P8C socket Up to 100 Mbps. **Cellular** 2 × mini−SIM slot **Cellular bands** Hub Hybrid (2G) ● 2G (GSM900/DCS1800 (B3/B8)) Hub Hybrid (4G) ● 2G (GSM900/DCS1800 (B3/B8)) ● 3G (WCDMA 850/900/2100 (B1/B5/B8)) ● 4G/LTE (FDD B1/B3/B5/B7/B8/B20) **Automatic switching between communication channels** ◇ Switching between SIMs — up to 4 minutes. ◇ Switching between 4G, 3G, and 2G networks of one SIM — instantly. ◇ Switching between Ethernet and SIM — instantly.

	Communication channels prioritization 1. Ethernet 2. Cellular connection Communication channels work in parallel to increase system reliability. Most of the data is transmitted via Ethernet.
Notifications	**Supported notification types** ◇ Push ◇ SMS ◇ Calls **Event types** ◇ Alarms ◇ Malfunctions ◇ Events ◇ Security mode changing The notification types are configured individually for each user.
Monitoring	**Supported protocols** ◇ SurGard (Contact ID) ◇ SIA (DC-09) ◇ Other proprietary protocols **Event types** ◇ System alarms and events ◇ Photo verifications ◇ Panic button coordinates **CMS software with photo verification support**
Power supply	**Main** 110–240 V~, 50/60 Hz Up to 10 W of mains power consumption. **Backup** 12 V⎓ battery (not included) Space in the body and rails for installing batteries with a capacity of 4 Ah and 7 Ah.

	Autonomous operation up to 60 hours Hub Hybrid with a 7 Ah backup battery can power a system of 30 wired devices for 60 hours. Wireless devices operate on batteries and do not require additional power supply.
Casing	**Dimensions** 7.56" × 9.37" × 3.94" **Weight** 30.05 oz **Operating temperature range** from 14°F to 104°F **Operating humidity** up to 75% **Protection class** IP50
Colours	● Black ● White
Complete set	**For Hub Hybrid (2G)** ● Hub Hybrid (2G) ● Power cable ● Battery connection cable ● Ethernet cable ● Casing ● Installation kit ● Eight 120 Ω termination resistors ● Quick Start Guide **For Hub Hybrid (4G)** ● Hub Hybrid (4G) ● Power cable ● Battery connection cable ● Ethernet cable ● Casing ● Installation kit ● Eight 120 Ω termination resistors ● Quick Start Guide
Additional information	**Compliance with standards** **Learn more**

	Warranty 24 months **Learn more** **Service life** 10 years **User manual** **Learn more** **Distinctions from other hubs** **Installer memo**