# Hub 2

# Security system control panel with support of photo verification

Capacity	Wireless Ajax devices up to 100
	Specifically, up to 10 sirens and 5 range extenders.
	<ul> <li>IP cameras or DVRs</li> <li>up to 25</li> <li>Seamless integration with Dahua, Hikvision, Safire, EZVIZ, Uniview IP cameras, and DVRs.</li> <li>RTSP support.</li> </ul>
	<ul> <li>Users</li> <li>up to 50</li> <li>Any number of admin users within the hub limit.</li> <li>PRO accounts for installers.</li> <li>PRO accounts for installation and monitoring companies.</li> <li>Access management for users.</li> </ul>
	<ul> <li>Automation scenarios</li> <li>up to 32</li> <li>Alarm responses.</li> <li>Scheduled actions.</li> <li>Security mode changing reactions.</li> <li>Temperature changing reactions.</li> <li>Humidity changing reactions.</li> <li>Reactions to changes in CO2 concentration.</li> <li>Reactions to pressing Button.</li> </ul> Security groups
	up to 9  Rooms up to 50
Compatibility	Range extenders ReX Jeweller ReX 2 Jeweller
	Opening detectors DoorProtect Jeweller DoorProtect Plus Jeweller
	Water leak prevention devices LeaksProtect Jeweller

WaterStop Jeweller

#### Glass break detectors

CombiProtect Jeweller GlassProtect Jeweller

#### **Motion detectors**

CombiProtect Jeweller **DualCurtain Outdoor Jeweller** MotionCam Jeweller MotionCam (PhOD) Jeweller MotionCam Outdoor Jeweller MotionCam Outdoor (PhOD) Jeweller MotionProtect Jeweller MotionProtect Curtain Jeweller

MotionProtect Outdoor Jeweller

MotionProtect Plus Jeweller

#### Fire detectors

FireProtect Jeweller FireProtect Plus Jeweller FireProtect 2 RB (CO) Jeweller FireProtect 2 RB (Heat) Jeweller FireProtect 2 RB (Heat/CO) Jeweller FireProtect 2 RB (Heat/Smoke) Jeweller FireProtect 2 SB (Heat/Smoke) Jeweller FireProtect 2 RB (Heat/Smoke/CO) Jeweller FireProtect 2 SB (Heat/Smoke/CO) Jeweller

## **Controls and panic buttons**

**Button Jeweller** DoubleButton Jeweller KeyPad Jeweller KeyPad Plus Jeweller SpaceControl Jeweller

#### Sirens

HomeSiren Jeweller StreetSiren Jeweller StreetSiren DoubleDeck Jeweller

### Smart air quality monitor

LifeQuality Jeweller

# **Integration modules**

MultiTransmitter Jeweller Transmitter Jeweller vhfBridge Jeweller

## **Relays for automation**

Relay Jeweller WallSwitch Jeweller

#### **Smart switches**

LightSwitch (1-gang) Jeweller LightSwitch (2-gang) Jeweller LightSwitch (2-way) Jeweller

## **Smart plugs**

Socket (type F) Jeweller Socket Plus (type G) Jeweller Socket (type G) Jeweller

## **Power supply units**

6V PSU for Hub 2/Hub 2 Plus/ReX 2 12V PSU for Hub 2/ReX 2

#### Wireless communication

# Jeweller communication technology

Proprietary wireless communication technology to transmit alarms and events.

# **Key features:**

- Two-way communication.
- Advanced anti-sabotage.
- Block encryption featuring a dynamic key.
- Instant notifications.
- Remote configuration in 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 sales region.

## 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.

# Polling interval

from 12 to 300 s

Adjusted by PRO or user with admin rights in the Ajax apps.

## **Encrypted communication**

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

# Frequency hopping

To prevent radio interference and radio signal interception.

## Wings communication technology

Proprietary wireless communication technology to transmit photo verifications.

## **Key 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 sales region.

### Maximum effective radiated power (ERP)

up to 20 mW

Featured automatic power control to reduce power consumption and noise interference.

### Radio signal range

up to 1,700 m/5,500 ft

Between the hub and connected devices (in an open space). Maximum range depends on the connected device.

### **Encrypted communication**

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

	Frequency hopping To prevent radio interference and radio signal interception.
Recommendations	The device operating voltage is 110–240 V~. Hub is designed for indoor installation only.
Communication channels	Ethernet 1 8P8C socket Up to 100 Mbps.
	Cellular 2 micro-SIM slots
	Cellular frequencies 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 Instant switching between Ethernet and SIM. Instant switching between 4G (LTE), 3G, and 2G networks of one SIM. Switching between SIMs takes up to 4 minutes.
	Communication channels prioritization
	Ethernet     Cellular connection
	Communication channels work in parallel to increase the system's reliability. Most of the data is transmitted via Ethernet.
Notifications	Supported notification types  • Push-notifications • SMS • Calls
	Event types
	<ul> <li>Alarms</li> <li>Malfunctions</li> <li>Security mode changing</li> <li>System events</li> <li>Non-security alerts</li> </ul>

	Automation devices' events
	The notification types are configured individually for each user.
Photo verification	Photo verification types
	<ul> <li>Photo by alarm</li> <li>Photo by scenarios</li> <li>Photo on demand</li> </ul>
	More about photo by scenario More about photo on demand
	Photo delivery time up to 9 s by default.
	Photo resolution up to 640 × 480 pixels Depends on the detector.
	Number of photos in a series: from 1 to 5 pictures
Monitoring	Supported protocols
	<ul> <li>SIA (DC-09)</li> <li>SurGard (Contact ID)</li> <li>ADEMCO 685</li> <li>Other proprietary protocols</li> </ul>
	Event types
	<ul> <li>System alarms and events</li> <li>Panic button coordinates</li> <li>Photo verification</li> </ul>
Power supply	Main 110-240 V~, 50/60 Hz Up to 10 W of mains power consumption.
	Backup Built-in backup battery: Li-ion 3 A·h Up to 15 hours of offline operation when Ethernet is disconnected.
	Alternative 6 V= Requires the 6V PSU for Hub 2/Hub 2 Plus/ReX 2 alternative power supply unit; sold separately.

12 V- Connected via an alternative power supply unit 12V PSU for Hub/Hub Plus/ReX, which is sold separately.  Tamper alarm The system receives notifications about attempts to detach the device from the surface or remove it from the mounting panel.  Protection against spoofing devices' authentication algorithms make it impossible to spoof the hub or connected devices.  Frequency hopping The users and the security company receive notifications in case of jamming or when the hub loses connection with the devices.  Enclosure  Dimensions 163 × 163 × 36 mm/6.42" × 6.42" × 1.42"  Weight 362 g/12.77 oz  Operating temperature range from =10°C to +40°C/ 14°F to 104°F  Operating humidity up to 75% Protection class IP20  Colours  Black White  Complete set  Hub 2 (4G) Jeweller SmartBracket mounting panel Power cable Ethernet cable Installation kit SIM card (depends on the sales region) Quick Start Guide  Warranty  24 months		
The system receives notifications about attempts to detach the device from the surface or remove it from the mounting panel.  Protection against spoofing devices' authentication Proprietary authentication algorithms make it impossible to spoof the hub or connected devices.  Frequency hopping The users and the security company receive notifications in case of jamming or when the hub loses connection with the devices.  Enclosure  Dimensions 163 × 163 × 36 mm/6.42" × 6.42" × 1.42"  Weight 362 g/12.77 oz  Operating temperature range from ~10°C to +40°C/ 14°F to 104°F  Operating humidity up to 75%  Protection class IP20  Colours  Black White  Complete set  Hub 2 (46) Jeweller SmartBracket mounting panel Power cable Ethernet cable Installation kit SIM card (depends on the sales region) Quick Start Guide		Connected via an alternative power supply unit 12V
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Complete set  Hub 2 (4G) Jeweller SmartBracket mounting panel Power cable Ethernet cable Installation kit SIM card (depends on the sales region) Quick Start Guide	Colours	Black
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Warranty 24 months	Complete set	SmartBracket mounting panel Power cable Ethernet cable Installation kit SIM card (depends on the sales region)
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Compliance with standards Learn more	Compliance with standards	Learn more

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