

DoorProtect Plus Jeweller

Wireless reed-switch opening detector with shock and tilt sensors

Guardian for doors, windows, and valuables

DoorProtect Plus Jeweller is designed to detect intrusion and burglary attempts, offering comprehensive coverage for doors, windows, skylights, and vaults. Equipped with a reed switch as an opening sensor, the detector features protection against chattering in its operation. Two magnets of different sizes provide more installation options. The device also detects shock and tilt with a built-in accelerometer, protecting the facility even when windows are in airing mode. All in line with the Ajax user experience, ensuring quick and easy device installation.

Durable reed switch in a plastic capsule	Protection against chattering to prevent false alarms	More installation options with 2 magnets included	Chime ¹ feature			
Shock and tilt detection with a built-in accelerometer	Adjustable tilt angle and alarm delay	Adjustable sensitivity of a shock sensor	Remote control and configuration			
Up to 5 years of operation with the pre-installed battery	Informative push notifications Critical Office: Opening detected, DoorProtect Plus Jeweller in Hall No. 1 Manufacturing: Shock detected, DoorProtect Plus Jeweller in Office No. 1	Up to 1,200 m communication range with an Ajax hub or a range extender ²	Hassle-free installation QR code ↓ SmartBracket ↓ App			
Terminals to connect a third-party NC detector	2 colors of glossy enclosure	Jeweller radio communication Power adjustment Frequency hopping Encryption TDMA Two-way communication	Compliance <table border="1" data-bbox="1435 1673 1879 1867"> <tr> <td>EN 50131 (Grade 2)</td> </tr> <tr> <td>PD 6662:2017</td> </tr> <tr> <td>UL</td> </tr> </table>	EN 50131 (Grade 2)	PD 6662:2017	UL
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Superior, Fibra, and Baseline product lines are mutually compatible. This opens up numerous possibilities for building systems of any configuration.

Wherever there is a risk of intrusion

Office	Home	Store	Warehouse	
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Discover future-proof hardware

- Reed switch
- Accelerometer
- Pre-installed battery
- Two magnets of different sizes
- Tamper against detaching the detector from the surface
- Jeweller antenna
- Terminals to connect a third-party NC detector
- SmartBracket mounting panel

No intruder goes unnoticed

Reed switch for reliable opening detection

DoorProtect Plus Jeweller features a durable reed switch that guarantees decades of trouble-free operation. Housed in a resilient plastic capsule, the reed switch remains intact during transportation, even in case of drops. Two magnets of different sizes provide more installation options: the small one operates at a distance of up to 1 cm from the reed switch, and the large one – up to 2 cm. The detector functions effectively irrespective of magnet placement.

- Two magnets included: small and large
- Plastic capsule protects reed switch during transportation

Immediate detection of threats

The built-in accelerometer swiftly responds to shock, detecting potential burglary attempts, such as door forcing and vault breaches. The shock sensor features three sensitivity levels that can be adjusted to match facility specifics. The detector can also ignore a single impact to minimize the risk of false alarms triggered by external factors. The installer can choose the appropriate settings for accurate detection, even in environments with vibrations from neighboring constructions or heavy passing traffic.

- Early detection of threats via the shock sensor
- Three adjustable sensitivity levels
- The option to ignore a single impact for false alarm prevention

Windows protection in an airing mode

The built-in accelerometer protects open windows, seamlessly adapting to diverse facility specifics. For doors and windows, installers can set up a tilt angle of the detector, ranging from 5 to 25 degrees. The system swiftly detects even the slightest deviations from the initial value and provides adjustable tilt alarm delay, ranging from 1 second to 1 minute. If the tilt angle surpasses the initial value for longer than a specified time, the system raises an alarm.

- Tilt detection
- Adjustable tilt angle
- Adjustable tilt alarm delay

Enhanced security with additional detectors

DoorProtect Plus Jeweller has terminals for connecting any third-party wired NC detector³ that can be used to enhance the reliability of the system. An installer can integrate a detector operating on a different principle, such as a roller shutter motion detector⁴. When connected to DoorProtect Plus Jeweller, a third-party detector promptly responds to alarms from other detectors and cable breakage.

Use a detector as a doorbell

The Chime feature transforms the combination of an Ajax opening detector and siren into a shopkeeper's bell. When the system is disarmed, the siren notifies about door openings with one of four available short sound signals. PRO users can adjust the volume

and assign different signals for separate entrances, making it easy to recognize whether someone entered through the main or a back door.

- Sound signals for door openings
- Signal setup for different security groups
- Customizable signals for separate entrances

The system requires an Ajax siren for the Chime feature to work.

Wire-free flexibility and reliable performance

Baseline devices operate without any wires, offering maximum flexibility during installation. The pre-installed CR123A battery from proven manufacturers ensures a hassle-free setup, requiring no additional steps to start operating the devices. In addition to real-time testing during battery production, Ajax Systems inspects every unit to ensure the accuracy of the battery characteristics. The battery can be easily replaced after approximately five years of autonomous operation. Its status is always accessible in the Ajax app. Users and security companies receive low battery level notifications months in advance, allowing for timely replacement without rushing.

- Real-time testing during battery production
- Up to 5 years of autonomous operation
- Low battery level notification in advance

Unique wireless technology

An Ajax system uses two-way secure radio communication based on the Jeweller proprietary protocol. It provides block encryption and device authentication at each communication session with the hub to prevent sabotage, spoofing, or data theft.

Ajax wireless technology has up to 1,200 m (3,900 ft) of radio communication range in an open space. This distance is on average longer than competing solutions. Automatic power adjustment ensures energy efficiency by avoiding the constant use of maximum power in system devices' radio transmitters. Also, the Jeweller technology is more stable due to using less noisy radio frequencies. Ajax hubs use frequency hopping to protect against radio interference and signal interception. The system automatically changes frequency within a band and notifies the security company and users about the jamming.

Jeweller uses polling to display the real-time device status and transmits alarms, events, and all measured readings into Ajax apps. It features encryption and device authentication to prevent spoofing.

- Up to 1,200 m (3,900 ft) of radio communication with a hub or a range extender²
- Encrypted two-way radio communication
- Notifications about jamming and communication loss

Scaled and comprehensive

ReX 2 Jeweller boosts the radio range of all Ajax devices via Jeweller and ensures stable communication even through steel and concrete via Ethernet using the wire as the additional communication channel. Up to 5 range extenders can operate within one Ajax system to expand the network twice as big, covering underground parking, basement, or metal hangar.

- Up to 5 range extenders within one system
- Ethernet as an alternative communication channel
- Big estate and large facilities
- Business center with underground parking
- Warehouse or industrial complex
- Sectional metal hangar

System supervision

All Ajax devices perform automatic self-diagnosis and report their states to the hub. Essential parameters, such as a tamper state, communication, power supply, and sensor statuses, are continuously monitored. The Ajax Cloud server controls communication between the hub and Ajax apps, ensuring instant notifications for ARCs, security companies, and users. In case of any malfunction

or communication failure, an engineer is informed immediately to provide necessary services.

- Automatic device self-diagnosis with status report
- Regular polling to display the current device state in apps
- Instant maintenance notifications

Sabotage resistance

<p>Tamper alarm</p> <p>The enclosure has a tamper button. It notifies the security company and users once the device is detached from the mounting panel.</p>	<p>Data encryption</p> <p>All data the system stores and transmits is protected by block encryption featuring a dynamic key. The encryption makes it extremely difficult to reprogram the device and provides robust protection against data replacement and theft.</p>	<p>Data-rich notifications</p> <p>The Ajax system instantly delivers informative push notifications about alarms and events. Security companies and users receive precise details about the incident, including the triggered device, along with the time and location.</p>
<p>Device authentication against spoofing</p> <p>During each communication session, the hub authenticates the device by checking its unique parameters. If any parameter fails the check, the hub ignores device commands.</p>	<p>Regular polling</p> <p>The device regularly exchanges data with the hub. The system controls each device's state and reports any malfunction or communication loss.</p>	<p>Communication loss detection</p> <p>At minimal polling interval settings (3 data packages every 12 seconds), it takes only 36 seconds to detect communication loss and notify the security company and users about the incident.</p>

Effortless installation and setup

DoorProtect Plus Jeweller is ready to operate straight out of the box. Using the SmartBracket panel, an installer can effortlessly mount the device, eliminating the need to disassemble the enclosure. Ajax apps help quickly make the device a part of the ecosystem: simply pair the device with the hub by scanning the QR code. It can always be reconfigured remotely without the need for on-site visits.

Connection	Installation	Setup	Monitoring
Pairing with the hub by scanning the QR code	The SmartBracket mounting panel: no need to disassemble the enclosure	Configuring and testing in mobile and desktop apps	The PRO Desktop app for macOS and Windows

¹ The Chime feature requires an **Ajax siren** to operate. [Learn more about Chime.](#)

² In an open space.

³ DoorProtect Plus Jeweller can not power the third-party detector. The power supply for this detector should be connected separately.

⁴ A roller shutter can detect cable breakage, while an NC detector responds only to alarms. The option is available for detectors with firmware version 5.53.1.0 and higher.