DoorProtect Fibra

Wired reed-switch opening detector

Guardian for doors, windows, and valuables

DoorProtect Fibra is designed to detect intrusion and burglary attempts, offering comprehensive coverage for doors, windows, skylights, and vaults. Equipped with two reed switches as opening sensors, the detector features protection against chattering in its operation. Two magnets of different sizes provide more mounting options. All in line with the Ajax user experience, ensuring quick and easy device installation.

Key features

2 reed switches	Chime¹ feature	More installation options with two magnets included	Easy wiring with removable device board
Protection against chattering	Up to 0.036 W	Terminals to connect a third-party NC detector	Remote control and configuration
to prevent false alarms	low power consumption		2 colors of matte enclosure
Informative push notifications Critical Office: Opening detected, DoorProtect Fibra in Office	Up to 2,000 m communication range with an Ajax hub² or a module that extends the Fibra line	Terminals to connect a third-party NC detector	Compliance Grade 2 (EN 50131) PD 6662:2017
Manufacturing: The device detached from the surface, DoorProtect Fibra in Warehouse	Fibra wired communication Power adjustment Encryption TDMA		INCERT SSF

Two-way communication	

Superior, **Fibra**, and **Baseline** product lines are mutually compatible. This opens up numerous possibilities for building systems of any configuration.

This is the wired device of the **Fibra product line**. Only accredited Ajax Systems partners can sell, install, and administer Fibra products.

Wherever there is a risk of intrusion

Store	Museum	Office or coworking	Warehouse	Medical center	Home	School
		ooworking				

Future-proof hardware

- Two reed switches
- Two magnets of different sizes
- Tamper against casing disassembling
- Tamper against detaching the detector from the surface
- Holding screw to secure the detector's casing
- Removable device board
- Fixing points for convenient detector installation
- Perforated parts for wire routing

High-end reed switches for reliable opening detection

DoorProtect Fibra features two durable reed switches, allowing the magnet to be positioned on either side of the detector (right or left). This flexibility provides installers with more options for wire routing, as the detector functions effectively irrespective of magnet placement. Housed in resilient plastic capsules, reed switches remain intact during transportation, even in case of drops.

- Effective detection wherever the magnet is placed left or right
- Plastic capsules for protecting reed switches during transportation

Easy integration with third-party detectors

DoorProtect Fibra has terminals for connecting a third-party wired NC detector. This allows an installer to enhance system reliability with any NC detector, whether newly installed or already in place, such as motion, opening, or vibration detectors. For example, DoorProtect Fibra enables you to integrate an existing third-party opening detector into the system.

- Opening detector
- Vibration detector
- Motion detector

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 needs to contain a siren for the Chime feature to work.

System supervision

All Ajax devices perform automatic self-diagnosis and report their states to the hub. Essential parameters, including tamper, 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 promptly informed to provide necessary services.

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

Unique wired technology

An Ajax system uses secure two-way communication based on **Fibra proprietary protocol**. It features **encryption** and **device authentication** to prevent sabotage, spoofing, and data theft. Fibra lines are **versatile** and support connecting different types of devices to one line: sirens, keypads, and detectors with photo verification.

- Up to 2,000 m of wired communication with a hub or a module that extends the Fibra line²
- One line for different types of devices
- Photo delivery via Fibra line without interference
- Protection against sabotage and spoofing

Energy efficiency as a priority

Fibra communication requires minimum power consumption, with the module consuming only up to 0.036 W at its peak. Fibra operates on the TDMA principle. Each device has a short time frame to exchange data with a hub, and its communication module remains inactive the rest of the time. This significantly reduces power consumption and helps avoid interferences even when multiple devices communicate simultaneously.

- Detector power consumption is up to 0.036 W
- TDMA and power-saving modes

Sabotage resistance

Tamper alarm

The compact detector contains two tampers that trigger an alarm if the device is detached from the surface or if its enclosure is opened. The system instantly notifies the security company and users of any intrusion attempts.

Data-rich notifications

Both the monitoring station and security system users instantly receive notifications about events. The information provided includes time, device name, event type, and room location⁴.

Authentication against detector spoofing

During each communication session, the hub authenticates the device using its unique parameters. If any parameter fails the authentication check, the hub ignores device commands.

Protection against short circuits

Fibra protocol, combined with a special digital algorithm, provides robust protection against unnoticed short circuits of the device. If someone attempts to short-circuit it, the device promptly notifies of a malfunction. The hub informs the Central Monitoring Station (CMS) and users about the incident.

Encryption of transmitted data

Regular polling

All data the system stores and transmits is protected by block encryption featuring a dynamic key. This encryption deters intentional sabotage attempts on the detector. The device regularly exchanges data with the hub. At minimal polling settings (3 data packages in 12 seconds), it takes 36 seconds to detect communication loss and notify the security company and users about the incident.

Next-level protection of Fibra line

Introducing **LineProtect**, the module designed to protect an Ajax hub and connected wired devices from sabotage when intruders cause overvoltage, short circuits, apply 110/230 V~, or use stun guns.

PRO is king

The myth about wired systems being difficult to install is busted. Ajax minimized an expensive, long, and dusty experience for PROs by developing an ultimate set of tools to make the process easy and flexible, from project design to client support and system maintenance. Everything for smooth and quick installation is included. Intuitive Ajax apps help make the device a part of the system, and each device can be reconfigured remotely at any moment. No need for programmers — everything is available out of the box.

Fibra power supply calculator

The online tool provides security engineers with detailed data on devices' power consumption, enabling easy pre-installation assessment of the wired system project. It helps design the project in real time, highlights problem spots, and offers solutions. Upon completion, results can be downloaded as a PDF file.

Installation

The installation kit includes all the necessary fasteners. The device board is removable, which makes the connection process more comfortable. For cable management, there are several perforated parts for cable routing. The magnet can be installed on either the right or left side: two reed switches detect opening equally fast regardless of the magnet placement.

- Removable device board
- All the necessary fasteners included in the installation kit
- Holding screw to secure the device

Setup

The device is paired with the hub automatically via Fibra line scanning. This tool is available in the desktop or mobile PRO apps. An installer only needs to name the device and assign it to the room and security group. The device can also be added by scanning the QR code or entering its ID manually.

- Pairing with a hub via automatic line scanning or QR code
- Device identification via triggering or LED indication
- Optimal default settings to cover major requests

Configuration

Intuitive Ajax apps provide remote set-up and testing with all device information from anywhere the Internet is available, on a smartphone or PC. An installer can remotely change the settings and provide services promptly without visiting the object.

- Configuration and testing remotely or on site
- iOS, Android, macOS, and Windows apps
- Accounts for companies and installers

Monitoring

An Ajax system transmits alarms to the **PRO Desktop** monitoring app or any third-party CMS. The security company receives an alarm notification in less than a second. Notifications include all the necessary information: name of the device, time of the event, and the exact room where the device is located. The security company also receives photo or video verification, capturing the reason for the alarm.

- Full addressability of connected devices
- Instant in-app notifications
- Alarm and event monitoring through Ajax PRO Desktop or third-party CMS

¹ The Chime feature requires an Ajax siren to operate. Learn more about Chime.

 $^{^2}$ With U/UTP cat.5, $4 \times 2 \times 0.51$ cable. Other cable types may have different values. Please use the **Fibra power supply calculator** to check the wired system project before installation.

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

⁴ The list of transmitted parameters may vary depending on the CMS type and selected communication protocol.