

FireProtect Plus Jeweller

Wireless indoor smoke detector with temperature and carbon monoxide sensors.



Find the detailed information on the device at the link:

<http://ajax.systems/support/devices/fireprotect-plus/>

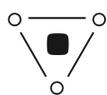
Key features



Smoke, CO, and temperature spike detection



A built-in 85 dB buzzer



Interconnected Fire Detectors Alarm feature



HazeFlow software algorithm to prevent false alarms



Automatic and manual smoke chamber checks



Autonomous operation without an Ajax hub



Up to 4 years of operation on pre-installed batteries



Hassle-free installation and maintenance



Remote control and setup via the app



Pairing with the system via QR code

Operating principle

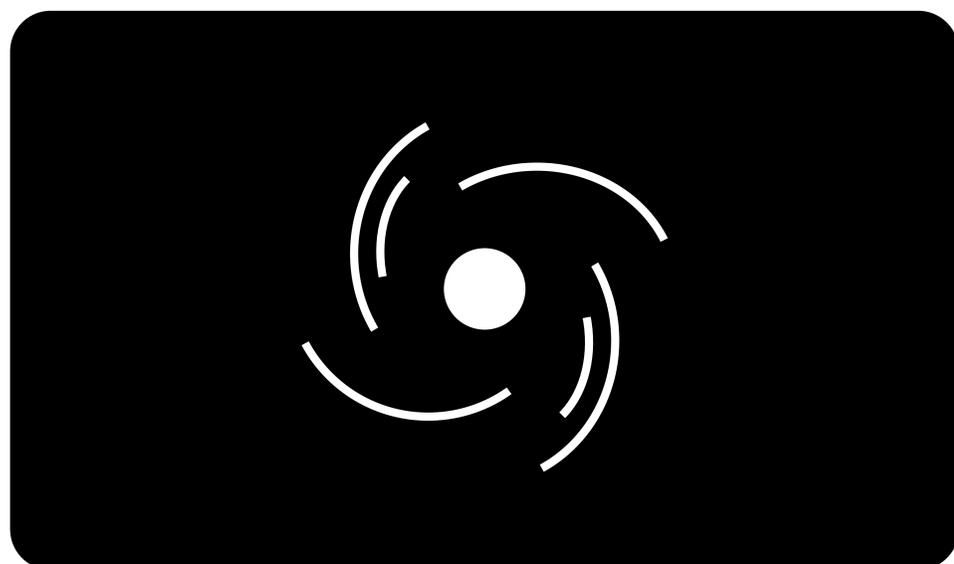


Fire detection

FireProtect Plus detects smoke with a photoelectric sensor. If no smoke is emitted, the heat sensor registers a temperature increase. When the temperature exceeds 60°C or rises by 30°C during 30 minutes, the detector recognizes this as a temperature spike and activates an alarm.

CO sensor

Carbon monoxide (CO) is a colourless, tasteless gas produced by burning petrol, wood, propane, charcoal, or other fuel. Improperly ventilated sealed or enclosed space may allow carbon monoxide to accumulate to dangerous levels. FireProtect Plus responds to hazardous levels of CO and notifies danger in time.



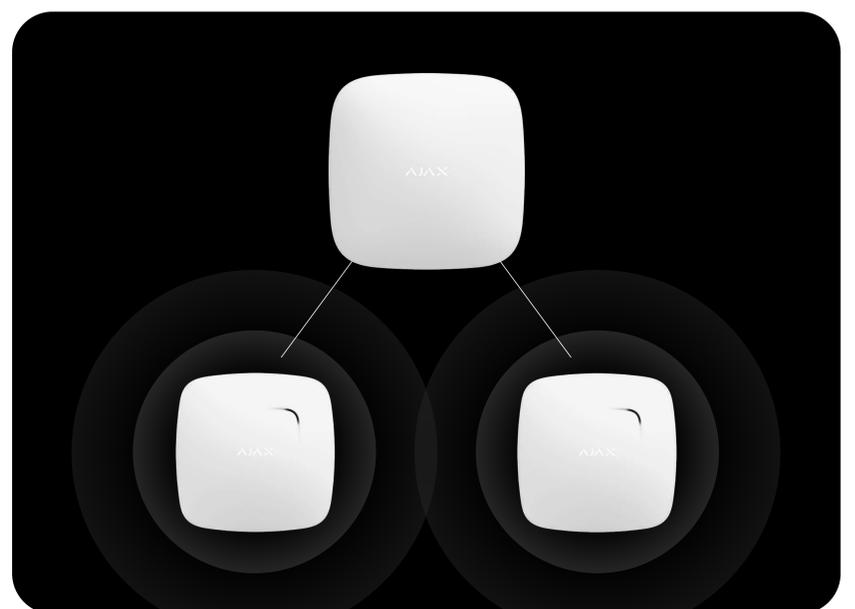
Interconnected Fire Detectors Alarm feature

The detector supports interconnected fire alarms: the feature activates built-in buzzers of all fire detectors in the system if at least one of them is triggered. In case of a fire, this allows alerting as many people as possible. Interconnected fire alarms are supported by FireProtect Plus with firmware versions 3.42 and higher.



False alarm prevention

To filter false alarms, the detector uses the HazeFlow algorithm – a software solution to verify the presence of smoke. The system will ignore the first smoke alarm and will raise the alarm if the detector registers smoke after 30 seconds during the second check.



Smoke chamber check

The device automatically checks the smoke chamber and notifies if it needs to be cleaned from the dust. A user can manually check the smoke chamber by pressing the logo on the device for 5 seconds or by running the check in the app.



Autonomous operation

The detector can be used autonomously without connecting to an Ajax hub. In this case, the detector notifies about fire alarms with a built-in buzzer and LED indication without sending notification to a user smartphone or monitoring station.



Jeweller is a **radio protocol** to provide fast and reliable two-way communication between Ajax hubs and connected devices. The protocol delivers instant data-rich alarms: security companies and users know which detector has been triggered, when and where it happened.

Jeweller features **encryption** and **authentication** to prevent spoofing and **polling** to display devices' statuses in Ajax apps. Supporting **up to 1,300 m** of wireless connectivity, Jeweller is ready to protect facilities and deliver **the best experience** for both system owners and installers.

Technical specifications

Compliance with standards	EN 14604:2005/AC:2008	Complete set	Hubs All Ajax hubs Range extenders All Ajax radio signal range extenders
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<p>Communication with a control panel or range extender</p>	<p> Jeweller communication technology</p> <p>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</p> <p>Maximum effective radiated power (ERP) ≤ 20 mW</p> <p>Communication range up to 1,300 m In an open space</p> <p>Polling interval 12–300 s Adjusted by a PRO or user with admin rights in the Ajax app</p> <p>Protection against spoofing Device authentication</p>	<p>Fire detection</p>	<p>Sensitive elements Photoelectric sensor Thermocouple CO sensor</p> <p>Alarm volume 85 dB At a distance of 3 m</p> <p>Type of notification Sound LED indication</p> <p>Temperature alarm threshold +59°C ±2°C</p> <p>CO level alarm threshold 0.003% (30 ppm) within 120 min or more 0.005% (50 ppm) within 60–89 min 0.01% (100 ppm) within 10–39 min</p>
<p>Power supply</p>	<p>Pre-installed batteries 2 × CR2 Main power supply</p> <p>1 × CR2032 Backup power supply</p> <p>Battery life up to 4 years</p>	<p>Installation</p>	<p>Installation must comply with fire safety rules and standards of the region of use</p> <p>Operating temperature range from 0°C to +60°C</p> <p>Operating humidity up to 80%</p> <p>Protection class IP65</p>

<p>Enclosure</p> <p>Colour white, black</p> <p>Dimensions 132 × 132 × 31 mm</p> <p>Weight 220 g</p> <p>Tamper alarm</p>	<p>Complete set</p> <p>FireProtect Plus Jeweller 2 × CR2 battery Pre-installed 1 × CR2032 battery Pre-installed SmartBracket mounting panel Installation kit Quick Start Guide</p>
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