

# FireProtect Plus Jeweller

Wireless indoor smoke detector with temperature and carbon monoxide sensors.



Find the detailed information on the device at the link:



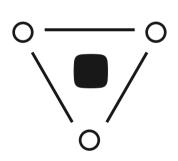
http://ajax.systems/support/devices/fireprotect-plus/



### Key features



Smoke, CO, and temperature spike detection



Interconnected Fire
Detectors Alarm feature



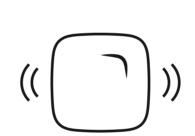
Automatic and manual smoke chamber checks



Up to 4 years of operation on pre-installed batteries



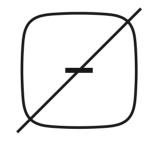
Remote control and setup via the app



A built-in 85 dB buzzer



HazeFlow software algorithm to prevent false alarms



Autonomous operation without an Ajax hub



Hassle-free installation and maintenance



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.

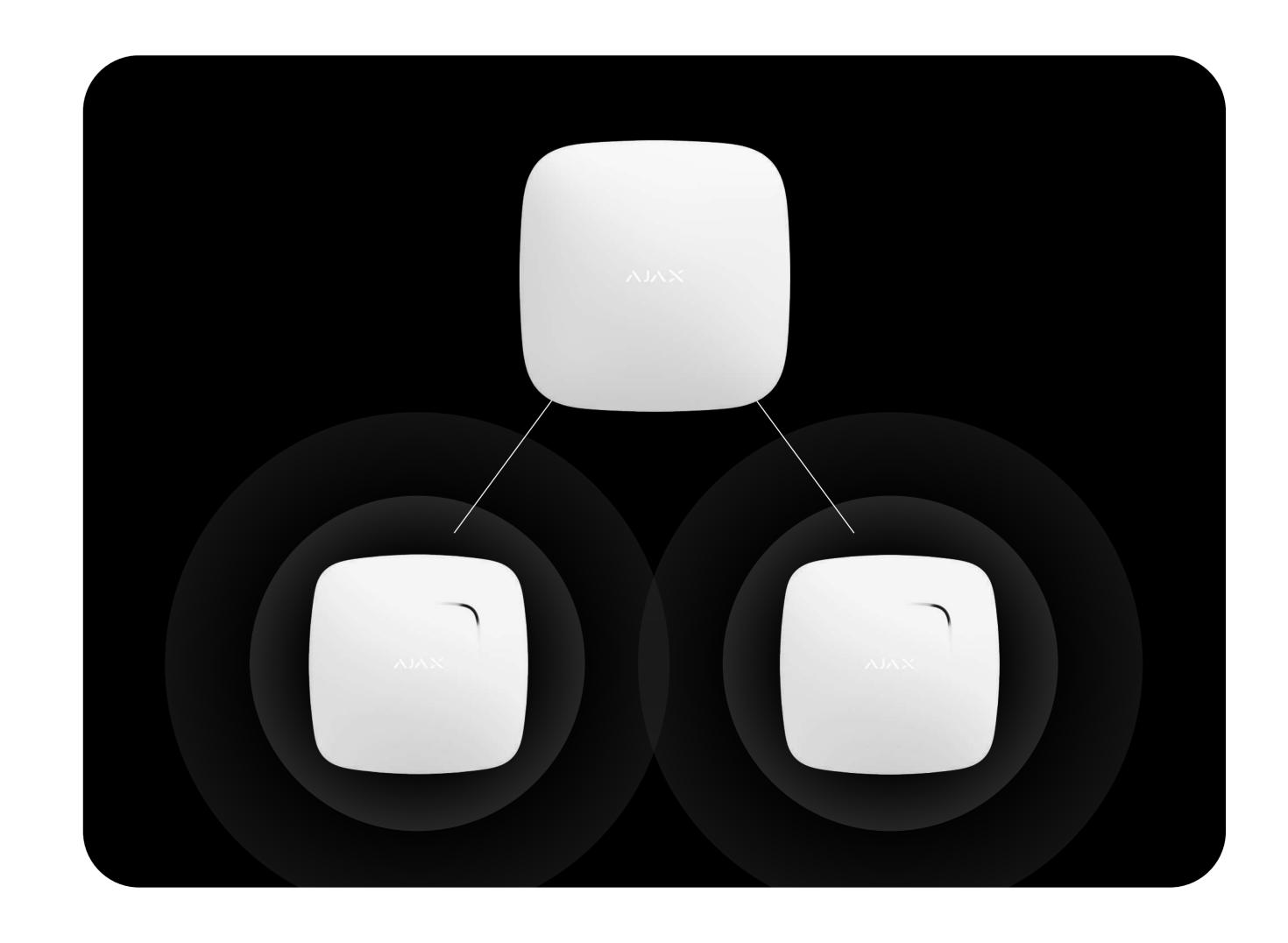


#### False alarm prevention

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.

### 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.



#### 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

Communication with control panel or rang extender

### Jeweller communication technology

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) ≤ 20 mW

Communication range up to 1,300 m In an open space

Polling interval
12–300 s
Adjusted by a PRO or user
with admin rights in the
Ajax app

Protection against spoofing
Device authentication

#### Fire detection

Sensitive elements
Photoelectric sensor
Thermocouple
CO sensor

Alarm volume 85 dB At a distance of 3 m

Type of notification
Sound
LED indication

Temperature alarm threshold +59°C ±2°C

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

#### Power supply

## Pre-installed batteries 2 × CR2 Main power supply

1 × CR2032

Backup power supply

Battery life up to 4 years

#### Installation

Installation must comply with fire safety rules and standards of the region of use

Operating temperature range from 0°C to +60°C

Operating humidity up to 80%

Protection class IP65

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