FireProtect 2 (Heat/CO)

Wireless fire detector with heat and CO sensors

FireProtect 2 SB (Heat/CO)	FireProtect 2 RB (Heat/CO)
Version with sealed batteries	Version with replaceable batteries
giving 10 years of operation	giving up to 7 years of operation

Against invisible threats

FireProtect 2 is a next-gen detector designed for residential fire safety. Two thermistors quickly react to the synthetic materials burning, and the carbon monoxide sensor alarms before the concentration level become threatening. Thought-out design, mounting, and in-app settings make installation straightforward and quick. Everything meets the most modern fire safety standards.

Versions with different battery type ReplaceableSealed	Compliance EN 54-5:2017+A1:2018 EN 50291-1:2018	
Interconnected alarm in 20 seconds	Sensors • Heat • CO	
Informative in-app notifications	85 dB built-in siren	
Two colours	Remote control and configuration	

Up to 1,700 m	Jeweller radio communication
range of communication with an Ajax hub	Two-way communication, TDMA, Encryption, Frequency hopping, Power adjustment
SmartBracket	Hassle-free installation
with an adjustable rotation angle	QR code SmartBracket App
Operates as part of the Ajax system or without pairing with an Ajax hub	

Compatible hubs and range extenders

- Hub Plus
- Hub 2 (2G)
- Hub 2 (4G)
- Hub 2 Plus
- Hub Hybrid (2G)
- Hub Hybrid (4G)
- ReX
- ReX 2

Detection

Even when it's fire without smoke

FireProtect 2 is equipped with **two A1R-class thermistors** to detect smokeless fire threats. They give a significant advantage in detecting a rapid temperature rise when synthetic materials burn, or a fire starts from smoldering. Thermistors are located outside the enclosure to eliminate life-saving detection delays. So FireProtect 2 is ready to detect a fire as fast as possible, even if it starts imperceptibly.

Heat alarm

- 10°C increase in temperature within a minute
- Exceeding +64°C

Detection

Protects from invisible danger

Carbon monoxide (CO) is colorless, odorless, and otherwise imperceptible without a carbon monoxide detector, so poisoning can occur unnoticed. Even low concentrations can be enough to have a negative health impact, especially on those with chronic illnesses, pregnant, the elderly, and young children. High-level exposure can cause permanent damage or even death in a very short period of time. FireProtect 2 warns about a dangerous CO concentration at the level of 50 ppm before even the first signs of poisoning occur. A built-in chemical sensor is responsive to low concentrations and can accurately detect the CO level straight up to 10 years.

CO alarm

- 50 ppm in no more than 90 minutes
- 100 ppm in no more than 40 minutes
- 300 ppm in no more than 3 minutes

Autonomous operation

Stable performance for a decade

Cutting-edge engineering of hardware and software allowed us to implement advanced capabilities and offer autonomy in the size of the compact smart detector. FireProtect 2 complies with strict residential fire safety standards with long-lasting battery life while featuring constant data exchange with a hub and real-time analysis system to filter false alarms. The detector is available in two versions with different battery options to cover every market need.

SB version	RB version
10 years of operation	Up to 7 years of operation
with non-replaceable sealed batteries	with replaceable CR123A batteries

Low battery warning

The detector reports low batteries at least 30 days before its full discharge. Installers and users get notifications from their Ajax apps. Also, FireProtect 2 has an LED indicator and audible beeps for a low battery alert.

In-app notification	Audible indication	LED indication

Alarm system

Always informed, everywhere

For residential fire alarm systems, informing people about fire danger is the priority. FireProtect 2 is equipped with a powerful 85 dB siren to eliminate the risk of missing an alarm. The detector uses impossible-to-ignore tones with different patterns to indicate an alarm or event, so it's easy to recognize the type of threat and react accordingly.

Different sound and LED indications

- Heat alarms
- Dangerous CO level
- Malfunction
- Low battery level
- End of life

Wireless interconnection

All FireProtect 2 detectors can synchronously notify about the fire. As soon as one of them detects a threat, it only takes 20 seconds for the sirens of other fire detectors at the facility to activate. If the fire occurs at night, the volume of 85 dB can wake up even a deep sleeper.

Unleash the Ajax power

The Ajax smart and complex ecosystem brings new standards to the fire safety industry. FireProtect 2 is ready to protect your home without an Ajax hub but can do even more when connected to it. Intuitive Ajax apps provide remote setup and all detector information in real-time from anywhere the Internet is available, on a smartphone or PC. With instant notifications, there is no chance of missing a fire alert, and

scenarios let you automate fire security to enhance home protection while you're away. A complete set with stable wireless communication — essential reliability tested over the years by nearly two million users.

Full monitoring for the building

Data-rich notifications

The system instantly notifies about alarms with the critical alerts from the Ajax apps. Security companies and users know exactly which device triggered, when and where it happened. The system controls each device state and reports if there is a malfunction or it's time to replace the batteries.

Detailed event log

The event log records 500 recent events within the system. The data is explicit with the device, time, and description of the event. It helps reconstruct the actual event and find the causes to obtain comprehensive information for firefighters or an insurance company.

Monitoring with PRO Desktop

With PRO Desktop, building administration staff can observe not only security but Ajax fire detectors for instant reaction to alarms. Device statuses, event log, batteries data — the CMS operator has a complete picture in one intuitive interface, all informative and centralized. The installation engineer can remotely change the settings and provide services in time.

Advanced automation for greater safety

Ajax fire detectors are a part of the Ajax ecosystem and can interact with automation devices and PhOD detectors of the MotionCam lineup through scenarios. In the case of a fire alarm, the **WallSwitch** relay de-energizes the house, and **Relay** activates emergency lights. At the same time, **MotionCam (PhOD)** sends pictures into Ajax apps to identify the cause of the alarm. The result is a reliable combination of security and automation that works as a Swiss watch.

Photo evidence of fire	Power supply control	Electric locks unlocking
To find out the situation at the protected facility and quickly respond to it.	To power off the possible cause of the fire and protect appliances from the consequences of firefighting.	To speed up people's evacuation and ease firefighters'

		access to the building.
Fire detected > FireProtect 2 > MotionCam (PhOD) > Cause of fire	Fire detected > FireProtect 2 > WallSwitch > Mains power-off > Relay > Emergency lights on	Fire detected > FireProtect 2 > Relay > Emergency exits unlocked

Unique wireless technologies

The Ajax system uses two-way secure radio communication based on the **Jeweller** proprietary protocol. It supports block cipher encryption and device authentication on every session with the hub to prevent sabotage, spoofing, or data theft.

Ajax wireless technology has **up to 1,700 meters** of radio signal communication range in an open space, making it on average longer than competing solutions from different manufacturers. Automatic power adjustment makes it energy efficient by not using the maximum power of radio transmitters in system devices on a regular basis. It is also more stable, using less noisy radio frequencies. Ajax hubs use radio 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.

Up to 1,700 meters of radio	Encrypted two-way radio	Notifications about jamming
communication with a hub	communication	and connection loss

Jeweller

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

Scaled and comprehensive

For complex radio signal conditions like large houses with thick walls or warehouses with several buildings, there is the **ReX** range extender. It **boosts the range** of all Ajax devices and manages their communication with the hub via Jeweller. And **ReX 2** assures 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, basements, and metal hangars.

- Up to 5 range extenders within one system
- Ethernet as an alternative communication channel

Effortless installation and maintenance

FireProtect 2 is ready to operate straight out of the box. There is no need to disassemble the detector during installation. With an improved SmartBracket panel, an installer can effortlessly fix the detector on ceilings and level it at 90° angles after mounting. The Ajax apps help quickly make the device a part of the system. And it can always be reconfigured remotely without site visits.

The detector is maintenance-free. A self-test system automatically diagnoses sensors and reports their state to the hub. Testing can also be run manually anytime in the app or by pressing the detectors' front panel with any suitable item, either a hand or a mop handle.

Connection

Pairing with the security system via QR code

Installation

SmartBracket panel with an adjustable rotation angle - no need to disassemble the enclosure

Setup

Configuring and testing in mobile and desktop apps

Maintenance

A self-test system automatically diagnoses sensors' state