

# FireProtect 2 AC (CO) Jeweller

Wireless mains-powered fire detector with CO sensor

## Against invisible threats

FireProtect 2 AC is a mains-powered detector designed for residential fire safety. The carbon monoxide sensor alarms before the concentration level becomes threatening. Everything meets the latest fire safety standards. Thought-out design, improved mounting panel with WAGO 221 connectors, and in-app settings make the installation process nice and easy, giving an ultimate experience for PRO.

Two types of interconnected fire alarm  Primary: via an Ajax hub, an alarm in 20 s  Fallback: detector- to- detector, an alarm within 60 s	Main power supply 110–240 V~  Backup battery	SmartBracket  with an adjustable rotation angle
CO sensors  with a 10-year service life	85 dB built-in siren	Easy wiring  with WAGO 221  <hr/> Two colours
Jeweller radio communication  <hr/> Up to 1,700 m  range of communication with an Ajax hub	Informative in-app notifications  Home: critical carbon monoxide (CO) level detected FireProtect 2 in Kitchen. Leave the premises immediately.  Home: Photo by scenario taken, MotionCam (PhOD) in Kitchen	Remote control and configuration  <hr/> 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
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# Discover future-proof hardware

- Test/Mute mechanical button
- LED indication of detector states
- Chemical carbon monoxide (CO) sensor
- 85 dB siren
- The lock to secure the device on the SmartBracket mounting panel
- SmartBracket with the protective lid to isolate the wiring
- WAGO 221, the removable lever-actuated connectors

## 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 AC 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

## Stable performance for a decade

The detector is powered by 110–240 V~ mains and has a sealed battery to serve as a backup. Even in a power outage, the detector keeps operating smoothly. Designed for the quick and reliable fire detection over its 10-year lifespan.

## 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

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

# Enhanced wireless interconnection

All FireProtect 2 AC detectors in the system can synchronously notify about the fire alarm. There are two ways: primary and fallback (both work in parallel). In case of danger, the initiating detector sends a fire alarm to the hub. The hub initiates the primary interconnect: all fire detectors will activate the built-in sirens in 20 seconds. This is three times faster than the fire standard requires. All information is immediately available in Ajax apps: initiating detector's location, alarm type, and exact time. Meanwhile, the initiating detector activates the fallback interconnection, directly sending the alarm to other fire detectors. Even if the connection with the hub is lost, raising the interconnected alarm takes a minute.

<b>Primary interconnected alarm via the hub</b> <b>20 seconds to activate up to 200 fire detectors</b>	<b>Fallback interconnected alarm from detector to detector</b> <b>Less than a minute to activate up to 50 fire detectors</b>
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## Unleash the Ajax power

The Ajax smart and complex ecosystem brings new standards to the fire safety industry. FireProtect 2 AC 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 alarm, the WallSwitch relay turns on ventilation, and Relay unlocks emergency exits. At the same time, [MotionCam \(PhOD\)](#) sends pictures into Ajax apps to indicate the people inside the premises who might be poisoned by carbon monoxide and need

emergency assistance. The result is a reliable combination of security and automation that works as a Swiss watch.

Photo evidence	Ventilation system control	Electric locks unlocking
To find out the situation at the protected facility and quickly respond to it.	To supply fresh air and reduce carbon monoxide concentration in the air.	To speed up people's evacuation and ease emergency and rescue services access to the building.
CO > FireProtect 2 > MotionCam (PhOD) > Photos from the scene	CO > FireProtect 2 > WallSwitch > Mains power-off > Relay > Ventilation on	CO > 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.

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

## Jeweller

Ajax wireless technology has up to 1,700 m 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, 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 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
- Security on a big estate and large facilities
- Coverage of basements and underground parking

# Effortless installation and maintenance

FireProtect 2 AC is ready to operate straight out of the box. It takes only 90 seconds to install the detector with no need to disassemble the enclosure. The upgraded SmartBracket mounting panel now has the lever-actuated WAGO 221 connectors familiar to every industry expert. An installer can wire the power supply without a screwdriver, secure the detector on ceilings, and level it at 90° angles after mounting.

The device is paired with the hub by scanning the QR code in the Ajax apps. And it can always be reconfigured remotely without site visits. 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 detector front panel.

Connection	Installation	Setup	Maintenance
Pairing with the hub via QR code	SmartBracket with the WAGO 221 connectors to secure the wires without screwdriver	Configuring and testing in the mobile or desktop apps	The dustproof smoke chamber that does not require cleaning