EN54 Fire Hub Jeweller

Wireless control and indicating equipment (CIE) for a fire alarm system, supporting intrusion protection devices

EN 54-2 · EN 54-4 · EN 54-13 · EN 54-21 · EN 54-25 · 2 GRADE EN 50131



Compliant doesn't mean complicated

Introducing EN54 Fire Hub Jeweller, Ajax's touchscreen CIE designed for all-around management of a fire safety system. It's easy to install, simple to use, and doesn't require much upkeep. Built-in communicators and a fully wireless device connection allow the system to be quickly deployed and connected to monitoring stations through Ajax apps. With its large touch screen and intuitive interface, the CIE provides detailed system status and alarm notifications, ensuring that staff are immediately aware of any situation.

The CIE also supports EN 50131 (Grade 2) intrusion protection, video surveillance, and automation devices, making it a unified solution for commercial and municipal sites. Each alarm can be supported by visual verification, which helps the facility staff in responding to the emergency.

Built to stand out

- One device for many use cases: fire safety, intrusion protection, video surveillance, and automation within a single system.
- User-centric system control and management via the CIE's touch screen and Ajax apps, on-site or remotely.
- Best-in-class wireless connectivity that easily outperforms wired alternatives.
- Hassle-free installation with all communicators built in — no enclosure disassembling or programming.

Intuitive system management via a big touch screen

Fire alarm control

With a single tap, authorized users can:

- reset the fire alarm
- start or silence the evacuation alarm
- mute or re-enable the CIE's built-in buzzer
- override preset activation delays
- run an indication test

Zone management

All sensors, sounders, and VADs are grouped within the **Fire zones** tab. Based on access permissions, users can view each device's status, disable selected devices, or initiate testing.

Sound and LED indication

The CIE has 40 LED indicators for each fire zone and six additional indicators to show the overall system status, including fire alarms, power supply state, and faults. A built-in 60 dB buzzer provides sound notifications.

Event log

The CIE log tab chronologically captures every fire alarm event and holds up to 5,000 entries.
The log provides explicit data, including the device name, timestamp, and a detailed event description.

Fully equipped with all necessary EN 54-25 certified communicators

Communication with system devices

- Jeweller, Wings, and TurboWings radio protocols
- Wireless range of up to 1,800 m
- Visual verification transmission
- Firmware updates transmission from the CIE to connected devices
- Data packets reload in case of transmission errors

Communication with Ajax server and apps

- Ethernet, Wi-Fi, and 2 × SIM 2G/4G (LTE) to access the internet
- Up to four providers can be connected simultaneously
- Instant automatic switch between communication channels
- Communication channels prioritization

Events transmission to the monitoring station

- SurGard (Contact ID) protocol
- SIA DC-09 protocol (IP-based)

All-in-one solution

EN54 Fire Hub Jeweller isn't just a fire alarm CIE — it's a flexible solution for building comprehensive security. It can operate as a standalone fire alarm or as part of an integrated system that combines fire alarm, intrusion protection, automation, and even video surveillance.

Fire detection and alarm system

- Reliable detection of smoke and rapid temperature rise
- Audible and visual indication that meets strict regulatory requirements
- Automated control of fire protection and evacuation equipment during fire alarms
- System management via the CIE touch screen or Ajax apps

Integrated system

- Fire alarm, intrusion protection, video surveillance, and automation in a single system
- Support for visual alarm verification to provide faster threat identification
- Enhanced system capabilities through automation
- Full control of all devices via Ajax mobile and desktop apps

Visual verification of alarms

The CIE supports photo and video alarm verification via Ajax MotionCam detectors and security cameras. Integrated in one powerful system, this device combination does the trick. It helps quickly assess the situation, saving users from concerns and monitoring companies from unnecessary dispatches.

Fire alarm confirmation Fire detected → Alarm raised → Cause of fire captured

Verification of other alarms Motion detected → Alarm raised → Evidence captured

Fast and secure authentication

Up to 200 personal access codes

Contactless access via Pass cards and Tag key fobs[1]

Three access levels for users, fire officers, and administrators

Quick installation and easy maintenance

- Adding to the system via QR code scanning
- Installation without disassembling the enclosure
- Maintenance and commissioning in Ajax apps
- Remote access and control for increased awareness
- Instant fault and maintenance notifications
- Internal battery hot swap without the CIE shutdown
- Automatic synchronization with a CMS

Sabotage protection

- Tamper alarm to notify of attempts to dismantle the device
- Device authentication to prevent spoofing
- Jamming detection and frequency hopping
- Detection of communication loss between the CIE and connected devices in 36 s
- Regular polling to display the current device state
- Data encryption throughout the transmission process

Compliance with standards

EN 54-2
EN 54-4
EN 54-13
EN 54-21
EN 54-25
EN 50131 (Grade 2)

Compatibility with devices

For detailed information, scan the QR code or follow the link:

ajax.systems/tools/devices-compatibility/

Communication with Ajax devices

Jeweller, Wings, and TurboWings communication technologies

Communication range
up to 1,800 m
up to 5,900 ft
In open space

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

Radio signal modulation
GFSK

Maximum effective radiated power (ERP)
≤ 25 mW

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

Communication channels

Ethernet
8P8C socket
Up to 100 Mbps

Cellular networks
2 slots for micro-SIM
- 2G
  GSM900/DCS1800 (B3/B8)
- 4G (LTE)
  FDD B1/B3/B5/B7/B8/B20

Wi-Fi
802.11 b/g/n module
up to 72 Mbps

Automatic switching between communication channels
- instantly between Ethernet, Wi-Fi, and cellular channel
- instantly between 4G (LTE) and 2G networks of one SIM
- up to 4 min between two SIM cards

Communication channels prioritization
1. Ethernet
2. Wi-Fi
3. Cellular connection

Communication channels work in parallel for increased system reliability, with Ethernet handling most data.

Capacity

Ajax devices
up to 200
- wireless devices in any proportion
- 5 range extenders max
- 10 intrusion sirens or keypads with a built-in buzzer max

Fire zones
up to 40

Users
up to 200

Security groups
up to 25

Rooms
up to 80

Automation scenarios
up to 64

Cameras or DVRs
- up to 36 Ajax NVRs
- up to 224 Ajax cameras via Ajax NVRs
- up to 492 standalone cameras

Event log
up to 5,000 events
Alarms and events are saved on the non-volatile onboard flash memory.

Display

Type
IPS, capacitive touch screen

Diagonal
10.1"

Resolution
1024 × 600 px

Backlight lifetime
50,000 hours
Guaranteed lifetime when the backlight brightness is 80%. Screen backlight can be manually adjusted in the CIE on-screen settings.

Interface language
English (by default)
Can be configured in the CIE on-screen settings or Ajax apps.

Relay outputs

Output 1
NC
For sending fault events to the monitoring software.

Output 2
NO
For sending fire alarms to the monitoring software.

Operating mode
bistable

External power supply
10–30 V⎓
The relay does not supply connected devices.

Energy consumption
up to 60 W
In a standby mode.

Maximum resistive load
up to 2 A at 30 V⎓

Power supply

Main power supply
110–240 V~, 50/60 Hz

Backup power supply
Li-ion 7.4 V⎓ battery
with 5 or 10 A·h capacity
Provided by EN54 Internal Battery (24h) or EN54 Internal Battery (72h). Batteries are sold separately.

Autonomous operation
from 24 to 72 h
Depends on the internal battery model. Batteries are sold separately.

User authorization

Contactless access[1]
Pass cards and Tag key fobs
(up to 200 devices)
DESFire® EV1, EV2
ISO14443-A (13.56 MHz)

Access codes
up to 200 personal codes for registered users
up to 200 codes for unregistered users

Duress codes
up to 200 personal duress codes

Enclosure

Color
white, black

Dimensions
263 × 223 × 54 mm
10.35" × 8.78" × 2.11"

Weight
1.526 g
3.36 lbs

Flammability rating
UL 94 V-0

Tamper alarm

Installation

Operating temperature range
from –10 °C to +40 °C
from 14 °F to 104 °F

Operating humidity
up to 75%

Protection class
IP20

Complete set

EN54 Fire Hub Jeweller
SmartBracket mounting panel
Installation kit
Ethernet cable
Special tool (key)
Quick start guide

[1] Contactless access will be available with future firmware updates.

For detailed information, scan the QR code or follow the link:

ajax.systems/support/devices/en54-fire-hub-jeweller

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