

**EN54** EN54 I/O Module (2X2) Jeweller

More

## Tech specs

**EN54 LINE**

# EN54 I/O Module (2X2) Jeweller

Wireless addressable module with two inputs and two outputs for a fire alarm system



## Device compatibility

**Check**

## Communication

## Jeweller communication technology

Proprietary wireless communication technology to transmit commands, alarms, and events.

Key features:

- Two-way communication.
- Advanced sabotage protection.
- Block encryption featuring a dynamic key.
- Instant notifications.
- Remote control and configuration in Ajax apps.

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## 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)

up to 20 mW

Automatic power control to reduce power consumption and radio interference.

## Radio signal modulation

GFSK

## Radio communication range

up to 1,700 m

Between the device and a control and indicating equipment (CIE) or a range extender in an open space.

Calculate the radio communication range at the facility 

## Encrypted communication

All stored and transmitted data is protected by block encryption featuring a dynamic key.

## Frequency hopping

To prevent radio interference and jamming.

Learn more 

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## Inputs

### Number of input lines for third-party devices

2

### Input terminals

- **Input 1, Input 2** – inputs for connecting third-party wired devices.
- **Shield** – common input for connecting shields of the cables that connect third-party wired devices.

### Type of connection

NO, NC, EOL, 2EOL, 3EOL

## EOL resistance

0.47 kΩ, 1.2 kΩ, 2.7 kΩ, and 6.2 kΩ resistors

Four resistors for each input are included in the complete set.

## Length of wired connection to third-party devices

up to 100 m

When 2×1.5 mm<sup>2</sup> (16 AWG) fire-resistant cable is used.

## Cross-sectional area of the cable

0.4–2.5 mm<sup>2</sup> (21–13 AWG)

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## Outputs

### Number of output lines for third-party devices

2

### Output terminals

- Output 1, Output 2 – relay outputs for connecting third-party wired devices.

### AC operating range

10–250 V~, 5 mA to 10 A (resistive load)

### DC operating range

10–30 V=, 5 mA to 5 A (resistive load)

## Cross-sectional area of the cable

0.4–2.5 mm<sup>2</sup> (21–13 AWG)

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## Key features

### Event types

An Ajax app specifies event types for wired device inputs. The selected type determines the text of alarm notifications and events of the connected device, as well as event codes transmitted to the CMS. A PRO or a user with admin rights can configure the event type in an Ajax app.

[Learn more](#) >

### Fail-safe mode

If the module is offline, discharged, or has hardware problems, it activates the connected devices automatically.

### Installation recommendations

The device is designed for indoor use only.

## Sabotage protection

### Tamper alarm

Notifications of attempts to detach the module from the surface or open the front lid.

[Learn more](#) >

### Protection against spoofing

device authentication

### Connection loss detection

after 36 s

Detection time depends on Jeweller settings.

### Input monitoring

detection of wired connection loss, short circuits, and malfunctions when the EOL, 2EOL, or 3EOL connection is used

Depends on the connection type.

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## Power supply

### Battery

2 × CR123A

Pre-installed.

## Calculated battery life

up to 5 years

## Casing

### Dimensions

116 × 180 × 62 mm



### Weight

547 g

### Operating temperature range

from 0 °C to +50 °C

### Operating humidity

up to 80%



### Protection class

IP21C

### Flammability rating

UL 94 V-0

## Color

Black



White



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## Complete set

EN54 I/O Module (2X2) Jeweller

2 × CR123A battery (pre-installed)

Installation kit

2 × set of 4 EOL resistors

Quick start guide

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## Revision

1

## Certification and compliance with standards



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### Additional information

#### Compliance with standards

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#### User manual

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#### Warranty

24 months

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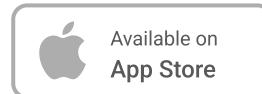
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- [Ajax Ready products](#)
- [Fibra wired protocol](#)
- [Ajax radio protocols](#)

## Software

- [For users](#)
- [Ajax PRO: Tool for Engineers](#)
- [Ajax Desktop](#)
- [Ajax PRO Desktop](#)
- [Ajax Translator PRO](#)
- [Ajax Cloud Signaling](#)
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## Solutions

- [Customer stories](#)
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- [Upgrades and retrofits](#)
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## Support

- [Manuals and articles](#)
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## Tools

- [Ajax device compatibility](#)
- [Video storage calculator](#)
- [Video device calculator](#)
- [Battery life calculator](#)
- [Radio communication range calculator](#)
- [Switches and outlets configurator](#)
- [Fibra power supply calculator](#)
- [All web tools](#)

## Connecting to CMS

Intrusion alarm monitoring

Video monitoring and visual alarm verification

Audio alarm verification

## Company

Blog  
About us  
Press page  
Events  
Career  
Ajax Next  
Students at CES 2026  
Reviews and feedback

## For partners

For partners  
Ajax Academy  
Partner Portal

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