# EN54 I/O Module (2X2) Jeweller

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

#### 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.

# 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

up to 5,550 ft

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

### **Encrypted communication**

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

# Frequency hopping

To prevent radio interference and jamming.

# 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

 $0.47 \text{ k}\Omega$ ,  $1.2 \text{ k}\Omega$ ,  $2.7 \text{ k}\Omega$ , and  $6.2 \text{ k}\Omega$  resistors

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

## Length of wired connection to third-party devices

up to 100 m

up to 325 ft

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)

# 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)

# **Operating mode**

- pulse
- bistable

# **Pulse duration**

#### from 1 s to 1 h 30 min

Pulse duration can be configured for pulse mode in Ajax apps separately for each relay.

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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.
	Automation scenarios The scenarios can be configured in Ajax apps separately for each relay.
	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.
	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.
Power supply	Battery 2 × CR123A Pre-installed.
	Calculated battery life up to 5 years

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	Dimensions
Casing	116 × 180 × 62 mm
	4.57" × 7.09" × 2.44"
	Weight
	547 g
	19.3 oz
	Operating temperature range
	from 0 °C to +50 °C
	from 32 °F to 122 °F
	Operating humidity
	up to 80%
	Protection class
	IP21C
	Flammability rating
	UL 94 V-0
	Black
Color	White
	EN54 I/O Module (2X2) Jeweller
Complete set	2 × CR123A battery (pre-installed)
	Installation kit
	2 × set of 4 EOL resistors
	Quick start guide
Warranty	24 months