MultiTransmitter Jeweller

Wireless module to integrate up to 18 third-party devices into the Ajax system

Communication

Jeweller communication technology

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

Key features:

- Two-way communication.
- Advanced anti-sabotage.
- 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

Radio signal modulation

GFSK

Radio signal range

up to 2,000 m

Between an integration module and a control panel (or range extender) in an open space.

Encrypted communication

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

Frequency hopping

To prevent radio interference and jamming.

Wired devices connection

Number of zones

18 wired zones

Multiple devices can be connected to one zone. The number of connected devices depends on their power consumption.

Type of connection

NC, NO, EOL

MultiTransmitter with a firmware version lower than 2.13.

NC, NO, EOL, 2EOL, 3EOL

MultiTransmitter with a firmware version 2.13 and higher. The Hub control panel does not support the 2EOL and 3EOL connection types.
Other hub models require the OS Malevich firmware version 2.13 or higher to support such connection types.

EOL resistance

from 1 kΩ to 7.5 kΩ with 100 Ω increment

MultiTransmitter with a firmware version lower than 2.13. EOL resistance is measured automatically in the Ajax PRO apps.

from 1 kΩ to 15 kΩ for each resistor, up to 30 kΩ of total resistance

MultiTransmitter with a firmware version 2.13 and higher. Resistance is measured automatically for each EOL resistor in the Ajax PRO apps.

Cable length

up to 400 m

When using a signal cable with a 0.22 mm² copper-clad aluminium conductor.

Operation mode

pulse, bistable

Adjusted by a PRO or user with admin rights in the Ajax app.

Event types

15 event types of wired devices

- Tamper alarm
- Intrusion
- Fire
- Auxiliary alarm
- Panic button
- Gas alarm
- Malfunction
- Leakage
- Glass break
- High temperature
- Low temperature
- Masking
- Duress code (opening)
- Vibration (seismic sensor)
- Custom

Adjusted by a PRO or a user with admin rights in the Ajax app.

Recommendations

The device is powered from the 100–240 V~ mains and designed for indoor use only.

Sabotage protection

Tamper alarm

Two tampers to detect the MultiTransmitter casing opening and alert about detachment from the wall.

Protection against spoofing

device authentication

Communication loss detection

within 36 seconds

Between a hub or range extender and MultiTransmitter. The detection time depends on the **Jeweller** or **Jeweller/Fibra** settings.

Instant detection of wired connection loss, short circuits, and malfunctions

when using EOL/2EOL/3EOL connection type

Depends on the connection type.

Power supply

MultiTransmitter power supply

100–240 V~, 50/60 Hz

Type

type A

Power supply is used inside the supervised premises.

Device's operating voltage range

100–240 V~, 50/60 Hz

Quiescent device's current consumption at nominal voltage

14.6 mA

Maximum device's current consumption at nominal voltage

69.6 mA

MultiTransmitter backup power supply

12 V⎓, up to 7 Ah capacity with a full charge cycle of up to 30 hours

MultiTransmitter average consumption from the backup battery after the main power supply loss is up to 33 mA (without detectors). When using a 7 Ah battery, the minimum operating time at a maximum load of 1 A will be 7 hours. For autonomous work for 12 or 24 hours, the maximum load should be no more than 0.55 A and 0.28 A, respectively.
The backup battery is not included in the set.

Low battery voltage

11.4 V⎓

Low battery recovery voltage

12.9 V⎓

End-of-life battery voltage

11.1 V⎓

Maximum output peak-to-peak ripple battery voltage

50 mV⎓

Minimum backup battery energy level in the charged state

100%

Connected devices power supply

10.5–15 V⎓, up to 1 A of total maximum current consumption

Three power lines powered by MultiTransmitter: one for fire detectors, and two for other devices.

Casing

Dimensions

192 × 238 × 100 mm

Weight of the white device

874 g

Weight of the black device

802 g

Operating temperature range

from −10 °C to +40 °C

Operating humidity

up to 75%

Protection class

IP40, IK06

The new casing version of MultiTransmitter Jeweller has light guides for the integration module LED indication, while the previous version has the LED indicator on the board.

Complete set

MultiTransmitter board

Casing

Power cable

Screw terminal block Adapter (only for INCERT compliance)

12 V⎓ battery connection cable

Installation kit

Quick start guide